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CLINICS.

Clinical Lectures.

ON ATYPICAL TYPHOID FEVER.

A CLINICAL LECTURE DELIVERED AT THE PHILADELPHIA HOSPITAL,

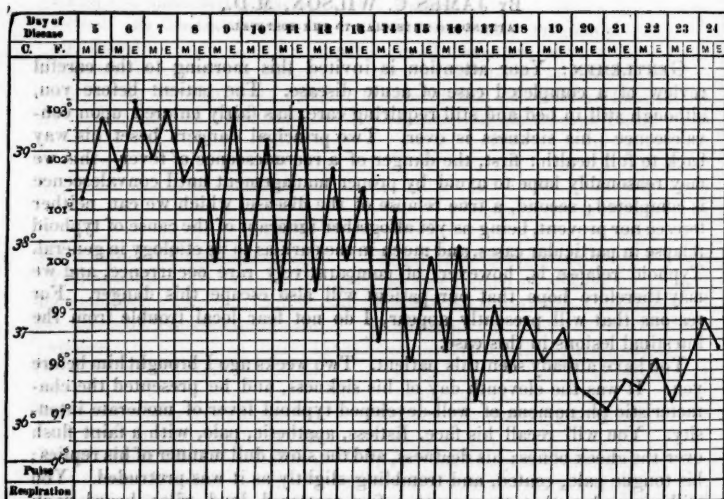
By JAMES C. WILSON, M.D.,

ATTENDING PHYSICIAN TO THE HOSPITAL.

GENTLEMEN: Your attention is invited this morning to the careful review of a completed case of acute disease. The patient before you, although still in bed and still requiring care, has fairly entered upon convalescence—his sickness is over. Two principal dangers beset his way back to full health: first, the danger of a recrudescence of fever—this we may reasonably hope to avoid by proper management until convalescence is completed; second, a true relapse of the disease, which we can neither foresee nor prevent, being as yet altogether ignorant of the cause of typhoid relapse in particular cases, and much in the dark as to its etiology in general. Typhoid relapse is, however, of comparatively rare occurrence, and we may therefore hope that our patient will also escape this danger. For reasons that will presently appear, I do not fear local trouble from the intestinal lesions in this case.

You have already seen this patient. Two weeks ago I brought him before you. It was the eleventh day of his sickness, and he presented the characteristic phenomena of well-developed typhoid fever of moderate intensity. You will recall his face, listless, apathetic, pale, with a faint flush over the cheek bones; his deafness, and the slow, dull manner of his replies; his tongue pale, coated, and trembling slightly as it was protruded. You will remember that there were a few scattered loud râles heard upon auscultation of the lungs, that there was diarrhoea amounting to three or four loose stools in the twenty-four hours, slight tympany without either tenderness or gurgling, and that there were scattered rose spots which faded upon pressure and at once reappeared upon the removal of the pressure. These spots were first seen on the fifth day after admission, or the ninth of the attack. I was enabled to demonstrate an extended area of splenic dulness. You will readily call to mind the elevated temperature and its range, for it was to these that our joint attention was chiefly directed.

The absolute temperature was not high, and the range between the evening and morning, the maximum and minimum of the diurnal cycle, was considerable, amounting to a full degree of the Fahrenheit scale during the first three days the patient had been under observation, and to nearly three degrees afterward, the evening temperature only once exceeding, by a fifth of a degree, 103° F. The investigations of Wunderlich long ago brought to light the fact that, as a rule, in uncomplicated typhoid fever the temperature during the whole course of the attack rarely exceeds the maximum attained at the close of the first or the beginning of the second week (or period). It is further well known that a temperature-range characterized by considerable morning remissions is much less injurious to the tissues, even when the evening maxima are relatively higher, than a continuous or subcontinuous fever. The consideration of these two facts, together with the absence of symptoms indicating either excessive constitutional action of the fever-poison (zymosis), or extensive or severe local lesions, led me to predict with some degree of confidence a favourable course for the attack. The prognosis has proved to have been correct. The temperature at no period after the evening of the day upon which you saw the case rose above 103° F. On the contrary, it steadily but slowly declined until the night of the sixteenth day, when it fell more than three degrees, from 100.2° to 97° , and it has since that date varied but



little from the normal. The patient no longer presents the symptoms of typhoid fever. He is pale, but his expression is neither languid nor listless. The flush has disappeared; he hears well, and replies to my questions promptly and with interest. We learn from him that the statements made by those who brought him to the hospital were in the main correct. He is a cellar-digger, 40 years of age, married, temperate, and of previous good health. Whilst at work four days before admission, he was suddenly

seized with chills, which recurred several times in the course of the day; there was severe frontal headache and disinclination to take food; at night he had fever and pains in his joints. The next day he was unable to go to work. I desire to call your attention especially to the fact that up to the day of the chills he had felt nothing amiss, but had worked as usual, and thought himself well. From his manner of replying it is clear that he is intelligent and that his memory is good. The riles are no longer heard, the tympany and spots have disappeared, diarrhoea has given place to slight constipation with formed stools, and the area of splenic dulness has diminished. About the thirteenth and fourteenth days there was slight pulmonary hypostasis; epistaxis did not occur, and there was no delirium. Two or three new spots appeared on the fifteenth day. Albuminuria did not occur.

Aside from the moderate severity of the symptoms in this case, in which respect it certainly stands forth in striking contrast to the examples of typhoid fever that are usually shown you in this theatre, your attention at once fixes itself upon three facts in the history, that are not in accord with the picture of the typical disease, as you have found it correctly drawn for you in the text-books, or vividly portrayed in the lecture-room, or have commonly seen it in the clinic, the wards, or in your own practice. These are, first, the abruptness of the onset; second, the short duration of the sickness, defervescence being complete upon the seventeenth day; and third, the comparative abruptness of the defervescence.

Great as are the variations from the ordinary type which this case presents in its origin, its course, and its termination, the symptom-grouping makes it clear beyond all doubt that we have had to do with an example of typhoid fever. This being established, the questions at once arise: To what group of the forms of typhoid is this case to be properly referred? And what are the departures from the common pathological conditions of typhoid fever by which to explain these conspicuous variations from the usual course of the disease?

In order to reply to these questions it is necessary to revert to a convenient nosological arrangement to which the various forms of disease due to the typhoid poison may be referred, and to briefly consider the influences by which the action of the poison is so modified as to produce well-marked and more or less constant variations in its clinical manifestations.

All cases may be referred to one or the other of two comprehensive groups:—

A. The typical.

B. The atypical.

A. The typical, or perfect, or common form is too familiar to require in this connection a word of description. Its insidious beginning, its prolonged duration, its gradual defervescence and tardy convalescence are as well known to you as is its unmistakable symptom-grouping. That different cases of such a disease should present variations in the prominence of certain symptoms or groups of symptoms, is quite in accordance with our experience in all diseases both acute and chronic. These variations are due, on the one hand, to differences in the relative degree of intensity of the action of the cause upon the fluids of the body at large, or upon the lymphatic system of the ileum; and, on the other, to differences in individuals as regards bodily constitution, temperament, previous condition of health, and so forth. Notable variations arise also in consequence of the presence of complications. But clearly apparent through all such variations is the

conformity to type, which sets forth the nature of the disease and renders the diagnosis a comparatively easy task. It is this conformity to type that renders subdivisions of this group unnecessary, and the discrimination of such forms as *bilious*, *nervous*, *ataxic*, *adynamic*, or *cerebral*, *thoracic*, and *abdominal*, not only useless, but positively misleading both in the lecture-room and at the bedside.

It is important to bear in mind that the fever in the typical cases, like that of scarlet fever and of smallpox, is made up of two distinct febrile movements—first, a primary fever, resulting from the infection of the tissues of the body by the specific virus; and later, a secondary, irritative or hectic fever, caused by the localized ulceration in the intestines, the formation of slough, and the resorption of septic materials.

B. The atypical or imperfect forms are much more rare, and present difficulties in their clinical study proportionate to their want of the very conformity to type that renders the investigation of the cases belonging to the first group relatively a simple matter. So great is this want of conformity to type in many of the atypical cases of typhoid fever, that they are not to be recognized by their clinical manifestations, but only in the light of a common etiological relation to well-developed cases occurring in more or less extended (local) epidemics. This statement is true of most epidemic diseases. Side by side with well-developed cases are seen imperfect, slight, or abortive cases manifestly due to the prevalent epidemic influence, but so faintly marked as to be recognizable only in the light of that influence.

The second comprehensive group must, from this point of view, be subdivided into a number of forms, which may be arranged in order, according to the degree of their departure from the typical disease. These forms are:—

- a. Mild typhoid (including walking typhoid).
- b. Abortive typhoid.
- c. Typhoid of childhood (so-called infantile remittent).
- d. Typhoid of the aged.
- e. Cases of febrile intestinal catarrh.
- f. Cases of afebrile intestinal catarrh.

These atypical or imperfect forms constitute, in most epidemics, a large proportion of the cases, and they will be found, I believe, to be much more common where the disease is endemic than has usually been thought, when the attention of physicians is more closely turned to the study of typhoid fever from an etiological as well as from a clinical standpoint. The modifications which characterize such cases are partly due to mild infection, or the smallness of the dose of the fever-producing principle; partly to an imperfect susceptibility on the part of the patient, and partly to differences in the reaction of the organism to the fever-poison and the products of unduly rapid waste at different periods of life.

a. The mild cases present the symptoms of the typical disease modified in respect of intensity, and in particular is this true of the febrile movement, which is of a lower grade. The commencement of the attack is usually gradual; there are prodromes, which pass step by step into the declared disease. Chilly sensations may occur; a decided chill is unusual. There is headache, diarrhoea; the nose may bleed, and the eruption may or may not appear. The temperature may reach upon the fourth or fifth day 104° F., but it rarely exceeds that point, and much more commonly

does not attain it. The temperature-range corresponds to that of the typical form, save that upon corresponding days it is a degree or more lower. The duration of this form may be four full weeks; it is perhaps oftener less than this, each of the four periods not exceeding four or five days. The febrile movement corresponds to the primary and the secondary fever of the fully developed disease. The intestinal lesions do not undergo resolution, but go on to sloughing.

The latent, or ambulatory form (*walking typhoid*) belongs to this group. In this form all the symptoms are at first mild; the disease shows itself in general malaise, prostration, and elevation of temperature, yet the sickness extends over three or four weeks, and the intestinal lesion proceeds to sloughing and ulceration. Herein lies the danger of this form of the disease. The patient regards himself as suffering from some slight indisposition, a "cold," or a "bilious attack," and continues to go about in a wretched way, or even, if he be a person of determined will, to attend to his ordinary occupations, and to eat such food as his appetite permits, until sudden delirium reveals to his friends the serious character of his illness, a profuse hemorrhage occurs, or, and this is still more common, symptoms of perforation supervene, and are followed, after a few hours, by death.

b. The abortive form appears to be not uncommon in Europe. In this country it is certainly rare. The attack begins abruptly; prodromes are usually of short duration, or they may be absent altogether. The temperature-range is, at first, that of the typical disease, save that it in some instances more rapidly attains its maximum. The invasion is often accompanied by rigors, sometimes by a decided chill. There is usually moderate diarrhoea; tympany, enlargement of the spleen, sometimes epistaxis, and often more or less bronchial catarrh. The characteristic eruption is frequently observed, and transient albuminuria is met with. Some time in the second week or early in the third, the sickness takes a sudden turn, and runs a similar course as regards ordinary typhoid fever, to that which varioloid runs as regards variola.

The defervescence is rapid, often being completed in from twenty-four to seventy-two hours, and is frequently attended by profuse sweating. Convalescence is also rapid. It is in the highest degree probable that in these cases the intestinal lesions undergo resolution, their evolution being arrested short of the ordinary necrotic processes. We, therefore, have to do with the primary fever due to the action of the special poison, and not with the secondary or septic fever due to ulceration and the formation of sloughs. The parallelism between these cases as compared with typical typhoid fever, and varioloid as compared with variola, is complete.

c. The term infantile remittent fever has been applied to typhoid fever as it occurs in children, for the reason that the pyrexia often assumes in them a distinctly remittent type throughout the whole course of the attack. The symptoms and complications are modified by the age of the patient. Children are very susceptible to typhoid.

d. In the advanced periods of life typhoid fever is rare. When it occurs, it runs a modified course. Its onset is insidious, the febrile movement is less intense than at earlier periods of life, and the temperature often falls during convalescence to markedly subnormal ranges. There is especial danger of collapse. Acute delirium is not so common, and diarrhoea is less apt to be urgent. The characteristic eruption is rarely observed.

e. In rare instances a slight disturbance of the functions of the body results from the infection, and gives rise to intestinal catarrh with eleva-

tion of temperature so slight and so irregular that it scarcely deserves the name of fever (100.4° F.).

f. Finally it may be stated upon the authority of Liebermeister and Dr. Cayley, that intestinal catarrh occasionally occurs in consequence of typhoid infection, in which there is no elevation of temperature at all.

It is evident that the case which occupies our attention to-day must be referred to the second of the subdivisions of the atypical forms of typhoid fever. The sudden onset of the attack, the rapid temperature-rise, which nearly attained its maximum upon the evening of the fifth day, the short duration of the whole sickness, and the abrupt fall of the temperature during the night of the sixteenth day, are characteristic of that form of typhoid fever properly called "abortive."

The sudden onset of the attack has been established by a careful cross-examination of the patient and his friends. The fact that the headache, still present when he came under observation, spontaneously ceased four days later, and that the eruption was first discovered on the fifth day after admission, the ninth of the attack, confirm this statement. For, as you well know, the eruption of typhoid usually appears at the close of the first or early in the second week, and the headache commonly ceases spontaneously about the tenth day.

The whole course of the attack has probably comprised only the primary fever due to the constitutional action of the typhoid-poison. For some reason unknown to us the intestinal lesions have undergone resolution without sloughing, and our patient has escaped the secondary or septic fever, which in the typical disease overlaps the primary febrile movement at its close, and prolongs the sickness with well-marked remissions and with a gradual defervescence to the end of the third or fourth week. It is for this reason that I do not especially fear trouble from the intestinal lesions during the convalescence in this patient.

The treatment has had no influence whatever in abridging the course of the attack. It has been practically expectant. The patient was kept at rest, not being allowed to rise for any purpose; he was from time to time sponged with cold water, for purposes of cleanliness rather than with any view of acting upon the temperature; his diet was regulated *secundum artem*. Of medicines, he took upon the first day a little calomel, afterwards at short intervals a draught containing compound tincture of cinchona with dilute muriatic acid, flavoured with syrup of orange-peel.

CASE OF INTRAMURAL FIBROID TUMOUR OF THE UTERUS.

A Clinical Lecture delivered at the Middlesex Hospital.

By HENRY MORRIS, M.A., F.R.C.S.,

Surgeon to the Hospital.

GENTLEMEN: Elizabeth B., aged 32, single, an upholsteress, was admitted on October 26, 1880, for complete retention of urine. Her usual medical attendant, Dr. Ayling, sent her to me with a letter to the effect that, on May 20, 1880, he was summoned, and found her suffering great agony from not having micturated for nineteen hours. He introduced the catheter, and drew off over three pints of urine. Next day, catheterization had to be repeated. She then went on for a week before the catheter was next required; then she continued well for three

months before she again required help. Of late, it had become necessary to pass the catheter twice daily; and as she had suffered acute pain at times about the pelvis, calculus or some other serious affection of the bladder suggested itself.

On admission, there was complete inability to micturate, so that the catheter had to be used at regular intervals. The urine was acid, of specific gravity 1015, and free from blood and albumen. She was anæmic, of a dark complexion and nervous temperament, with twitchings of the face when spoken to, and an hysterical look and manner. Her general health had been good; but she had had much mental trouble of late, and to this she attributed her illness. When I examined her on October 28th, at 2 P. M., though her urine had been drawn off at 8 A. M., her bladder was distended, and formed a large prominent ovoid abdominal swelling to the right of the middle line, and inclining very obliquely outwards and upwards. In the left iliac fossa there were marked fulness, dulness, and increased resistance, quite distinct from the abdominal tumour formed by the bladder, and suggesting the presence of a solid or tense cystic tumour of rounded outline. A male catheter was easily introduced, and passed a long way before urine began to flow; the catheter took a very oblique course, and it was found possible to introduce it, without resistance, so far into the bladder that the bone ferrule was hidden by the vulva. The bladder being emptied, an examination *per vaginam* was made; but, as a fairly perfect hymen existed, a satisfactory exploration of the pelvis could not be effected without causing pain. It was ascertained, however, that the vagina was markedly inclined to the left, but that its wall was projected on the right side for a short distance upwards, so that the idea of a bifid vagina was for a moment suggested to the mind of the examiner. The uterus was so much drawn up, and to the left side, that at this examination the os and cervix were not felt. The rectum was found flattened by a smooth, round, hard, unyielding tumour in front, which did not feel like the os or enlarged fundus of the uterus. The mass was clearly inclined to the left side, whether examined with the patient on the back or on the side. A simple enema was ordered to be given every morning. Subsequently (October 30th and November 2d) she was seen by Dr. Hall Davis, who found the uterus considerably drawn up, the os being felt as a mere depression close to the upper border of the symphysis pubis; and the uterine sound passed for four and three-quarter inches into the cavity of the uterus.

From October 28th to November 10th, the catheter was not required.

On November 3d, and the following day, she had intense thirst, and the catamenia appeared on the 3d, and lasted till the 7th. In the night of November 6th, she sweated a great deal; and on the afternoon of November 7th, she had nausea, her temperature went up to 102.6° , and she felt considerable pain in the left iliac fossa. These symptoms continued during the night and the next day.

On November 9th, there were the same symptoms, except that the pain in the abdomen was a little more diffused, and there was now tympanites. She also complained greatly of a parching thirst; she had had rigors during the morning and the preceding evening, was very lachrymose in manner, and had an unaccountable and alarming apprehension that she would soon die. For the first time, too, there was on this day a slight purulent discharge from the vagina. Hot fomentations, with opium and turpentine, were continuously applied to the abdomen; opium, in half-grain doses, was given every four hours; and milk-diet and ice to suck were ordered. The enemata had been discontinued.

On November 10th, the catheter had again to be used. The temperature was 99.8° , the pulse 96, and respirations 25. She had had a bad night, owing to frequent retching. There were distension and slight general tenderness of the abdomen, the girth of which was twenty-seven inches.

On November 11th, the patient complained of spasms and tenderness in the abdomen. The tongue was red, dry, and beefy, with prominent papillae. The temperature was 101.6° , and the pulse 120; the respirations were 28 and shallow. The catheter was not required.

On November 12th, she lay with her knees drawn up, complaining of pain in the abdomen, the girth of which was now twenty-nine inches. There was much tympanites, but no marked tenderness on pressure. The tongue was in the same state as on the previous day. She experienced parching thirst, and vomited occasionally. The pulse was 126, not hard, but thready, and very compressible. There was marked muscular tremor, especially of the hands. She was very restless, talkative, and excitable. Towards the latter part of the afternoon, she was troubled with loud hiccough and retching. The temperature was 99.2° in the morning; 99.6° in the evening. During the night, she slept for intervals from 12 to 2 A.M.; she then awoke, complaining of increased pain and fulness in the abdomen. Fresh fomentations seemed to relieve this; but about 4 A.M. on the morning of the 13th, she died quietly within a few minutes. Her death was quite unexpected by the nurse, who had been closely watching by her side.

At the *post-mortem* examination, made ten hours after death, Dr. Fowler found recent general peritonitis gluing together the coils of intestine, and in the peritoneal cavity about one pint of turbid fluid, with floating flakes of lymph. The inflammation was most marked about the brim of the pelvis. Recent adhesions bound the structures in the broad ligament to the neighbouring parts on each side. It seemed probable that the peritonitis had commenced at the left ovary, in which were several small collections of pus, one of them communicating directly with a sloughy point, surrounded by a patch of purulent membrane, on the surface of the ovary. The liver and spleen were congested. The right ureter was somewhat distended, as were also the pelvis and calyces of this kidney. The inner surface of the pelvis showed signs of violent and recent inflammation. The surface of the kidney was mottled; and, on section, the cortex appeared diminished. The left ureter and pelvis were more dilated than the right, and contained purulent-looking urine; and in the left kidney the inflammation was more extreme, and had extended along the uriniferous tubules. The bladder was pushed up and towards the right iliac fossa; and, though quite empty, reached one inch above the upper border of the os pubis. Its walls were hypertrophied, and sacculated, and beneath the mucous membrane there were small extravasations, but no appearance of cystitis. The vagina was elongated; and, owing to the upward traction of the uterus, the vaginal part of the cervix uteri was obliterated, so that the os was a mere slit in the posterior vaginal wall. The uterus and its appendages were displaced upward and to the left by a large tumour, which almost filled the pelvis, and was growing in the right wall of the uterus. The cavity of the uterus was found to measure four and a half inches; its axis was oblique, being directed upwards and to the left. Both the Fallopian tubes contained pus. The right ovary was healthy; but the left, though of nearly normal size, was suppurating at various points. The tumour in the right wall of the uterus somewhat resembled the uterus in shape, but far exceeded it in size, and measured six inches in its long diameter and three inches transversely. The uterine tissue was plainly seen on the surface of the tumour, showing it to have been of intramural origin. On section, it had all the characters of uterine fibroids. At the upper part of the uterus, two small fibroid tumours, about as large as chestnuts, were seen sessile upon the peritoneal surface. The left pleura was normal; but there was recent lymph over the lower half of the right pleura, but no fluid in the pleural cavity.

Remarks.—The first step was to ascertain by vaginal and rectal examination the cause of the displacement of the bladder, and of the intermittent retention of

urine; and to connect it, if possible, with the fulness in the left iliac fossa. The next question was as to the character and connections of the tumour, and whether it could be removed, or in any other way dealt with, so as to allow the bladder to resume its place and functions. This was a question of real difficulty in the case. As a rule, I believe it may be assumed that, in the female, a pelvic tumour which pushes the bladder out of the pelvis and to one side of the median line, which causes lateral and upward displacement of the uterus, and is felt *per rectum* as a large mass on the front aspect of the bowel, is, in all probability, either an enlargement of the uterus itself, or of one of the appendages of the uterus. I have seen, however, in one instance, the bladder pushed right out of the pelvis into the abdomen, by a hydatid cyst. In E. B.'s case it was possible to exclude certain other not uncommon forms of pelvic tumours. Thus (1) pelvi-peritonitis (which M. Nonat, as well as Bernutz and Goupil, tell us, have not unfrequently been mistaken for fibroid of the uterus), and (2) pelvic cellulitis were negatived by the absence of any coexisting or previously existing affection of the generative organs, by the absence of all pregnancies or confinements, and by taking into consideration the sudden commencement of her illness, marked by the single symptom, retention of urine. (3) Hæmatocele was excluded by the freedom from all previous catamenial disturbance, of sanguineous discharge, and of febrile symptoms; and by the altered condition of the os and cervix uteri, the increased dimensions of the uterine cavity, and the mode of onset of the illness. (4) Certain morbid states of the uterus itself could be excluded, such as flexion of the womb; because, though these may either cause retention of urine or difficult defecation, the tumour in this case was large enough to flatten the rectum and displace both uterus and bladder, and the uterine sound could be passed, and turned easily in the uterus. (5) Cancer of the body of the uterus sometimes occurs without the os or cervix being affected, at any rate for a long while; in cancer, too, the uterine cavity may be markedly increased, and the uterus itself is commonly fixed, and presses considerably upon the rectum. But cancer was negatived by the entire absence of uterine hemorrhage and of vaginal discharge, by the comparatively unimpaired state of her general health, and by the great displacement of the bladder to one side, and of the uterus to the other—a condition which, so far as my experience goes, is not met with in cancer of the fundus uteri.

Thus the diagnosis was brought down to a question between fibroid of the uterus and ovarian tumour. The reasons for thinking it a fibroid, rather than an ovarian tumour, were the firm hard texture, the absence of any elasticity or fluctuation, the displacement of the uterus in the direction of the tumour, the altered condition of the os and cervix uteri, the enlargement of the cavity of the womb, and the slight degree to which the tumour had risen out of the pelvis. The retention of urine, too, was more in favour of fibroid than of ovarian tumour; for, though ovarian tumours, when retained in the pelvis, have in some instances given rise to retention of urine, dysuria, and other bladder-symptoms, yet there is a great and frequent tendency for fibroids to irritate and mechanically obstruct the bladder. It is even said (West, *Diseases of Women*, p. 289) that retention of urine is occasionally the first symptom of uterine fibroid; and the accuracy of this statement is verified by this case. On the other hand, the elongation of the cavity of the uterus is not at all inconsistent with ovarian tumour, and is commonly stated to be not very unfrequently associated with it.

The reasons for thinking the tumour ovarian, rather than fibroid, were, first and chiefly, the absence of hemorrhage. Hemorrhage being one of the most characteristic signs of fibroid, its absence is of itself sufficient to lead one to suspect the ovary, rather than the uterus, as the seat of the tumour; but this case shows that

the most complete immunity from hemorrhage ought not to influence us too strongly against the possibility of fibroid. Secondly, the one-sided situation of the tumour, the high position of the uterus, the smooth and even surface of the tumour as felt *per rectum*, the apparent solitariness of the tumour (fibroids being generally multiple), and perhaps, also, the age of the patient, were also in favour of ovarian tumour.

Nothing could be inferred from the rate of growth of the tumour, since nothing wrong was suspected until the first attack of retention, five months before admission. One means towards a more positive diagnosis was purposely withheld, until after the approaching catamenial period had passed; and very fortunately, as the case terminated, this was so. I refer to puncturing with the aspirator. This, by yielding a negative result, would have been another factor in favour of fibroid, and would doubtless have clinched the diagnosis.

After thus establishing the non-cystic nature of the tumour, no treatment could have offered any prospect of permanent or real relief. Ergot, which has been found useful in some cases, would have been tried, but one cannot think with much if any good result. Even if an exploratory abdominal section had been ventured upon, the operation must have been abandoned, owing to the firm connections of the tumour, and the way in which it was wedged into the pelvis. The patient, therefore, would have been doomed to a life of misery, had not an acute intercurrent disease mercifully carried her off.

The attack of peritonitis was, at the outset, quite local, beginning in the left iliac fossa, *i. e.*, the situation of the fulness felt at the time of her admission. From this it spread over the whole abdomen. As the attack followed immediately upon a catamenial period—indeed, commenced before the period was quite over—it was supposed to have been excited by inflammation of the left ovary; and on the hypothesis that the tumour was ovarian, it was thought that the whole, or a part of the cyst had suppurated (Case by M. Nonat: Bernutz and Goupil, vol. ii. p. 145)—suppuration being indicated by the variable temperature and repeated rigors. Still, on the other hypothesis, it had to be borne in mind that fibroids of the uterus may set up fatal purulent peritonitis without the ovaries, Fallopian tubes, or vagina being affected. (Case by Bernutz and Goupil in *Diseases of Women*, vol. ii. p. 156.)

The immediate cause of the peritonitis was doubtless the extension of inflammation from the ovary, or along the Fallopian tubes to their fimbriated ends; whilst the cause of the abscess in the ovary (itself a rare condition), and of the suppuration in the Fallopian tubes, as well as of the dilatation of the ureters and the acute inflammation of the kidneys is to be looked for, I think, in the irritation, displacement, and compression exercised upon these various structures by the uterine tumour.—*British Medical Journal*, May 21, 1881.

MONTHLY ABSTRACT.

Anatomy and Physiology.

On the Sense of Light and the Sense of Colour.

Dr. CHARPENTIER details some interesting physiological experiments (*Archives d'Ophthalmologie*, Dec. 1880) on the perception of light as distinct from that of colour. In these researches he used an instrument devised by himself (figured in Wecker's and Landolt's *Ophthalmologie*, tome 1, p. 530), which enabled him to measure exactly the amount of light required to excite respectively luminous or chromatic sensibility in various portions of the retina. He found that all coloured light, however simple in composition, if gradually augmented above zero, first of all produces a sensation of mere luminosity, and only subsequently one of colour. The chromatic sensation is at first ill-defined, and does not become distinct and definite until the light has assumed a certain intensity, which varies with its nature and the portion of retina affected. The luminous sensation is separated from the chromatic by a larger interval, in proportion as the region of the retina affected is distant from the yellow spot. The sensation of white is due to the neutralization of two or more chromatic sensations, owing to which neutralization the sensation of luminosity, which is generally masked, reappears and predominates. A certain quantity of light is lost in overcoming the inertia of the ocular apparatus. This is shown by the fact that, after a sojourn in darkness, a certain minimum intensity of light is required for perception, but this minimum becomes considerably reduced after the retina has been stimulated by previous excitation. On the other hand, the amount of light required to stimulate the chromatic sense remains the same in each case. Chromatic perception is not increased or diminished by the addition of white light; for although in any given case certain coloured rays have been necessarily added, these rays are neutralized by the complementary colour rays existing in white light.—*Lond. Med. Record*, April 15, 1881.

Materia Medica and Therapeutics.

On Blisters.

In a communication to the Société de Thérapeutique, published in the *Revue de Thérapeutique*, p. 152, M. CORNIL states that, when cantharides is administered to an animal—for instance, to a rabbit—either by the mouth or by absorption through the skin, as when a blister is applied, poisoning is produced, characterized by cystitis, nephritis, and inflammatory lesions in the liver and in the lung. In fact, twenty minutes after the cantharides is injected, the following lesions are found in the cavity of a glomerule of the kidney. A large number of white globules are found between the envelope of Miller's capsule and the vascular bundle which composes the Malpighian glomerulus. In addition a granular exudation is found in the uriniferous tubes, which fills and obliterates their calibre. At the end of an hour, the lesions are characterized by the proliferation of the cells, which by mutual pressure become irregularly flattened. There exists, therefore, a true catarrh of the uriniferous tubes. In the bladder the disturbances

are nearly of the same kind, but the lesions are superficial; the irritating principle of the cantharides has acted directly on the internal surface of the bladder. In the lung, the small bronchial tubes are filled with white pus-corpuscles; these lesions, which indicate inflammation of the mucous membrane, are found in all the parenchyma, and are the consequences of the irritating principle, the cantharidine, carried into all the organs by the circulation. The same kind of lesion of its mucous membrane is found in the larynx and in the trachea. If a blister be left on sufficiently long, the same lesions are obtained. M. Cornil therefore thinks that large blisters applied to the chest, and left on from fifteen to twenty hours, are more injurious than useful. By this method, not only are cystitis and nephritis brought on, but inflammation of the bronchi and of the pulmonary parenchyma itself. He has therefore arrived at the conclusion that, in order that blisters should not be injurious, they should not be allowed to remain on more than from three to four hours.—*British Med. Journal*, April 30, 1881.

The Action of Tannin on the Animal Body.

Among the oldest known and most frequently employed medicines are to be reckoned the astringents; but pharmacological investigations have been very seldom directed towards them. In a recent paper (Virchow's *Archiv*, Band lxxxi. p. 74), LEWIN furnishes a very exhaustive account of one of the most important of these, namely, tannin. The official preparation of this drug being by no means pure, its separation for the observations detailed in this paper was conducted by means of Löwe's method, which is based upon the property of concentrated solution of common salt to precipitate only tannic acid, and not gallic acid; the pure tannic acid being subsequently separated from the chloride of sodium by means of acetic ether. Gallic acid has the property of precipitating albumen and albuminous substances from their solutions. These precipitates, insoluble in water, dissolve in an excess of albumen or of gelatine solution, in dilute lactic acid, in carbonic acid, and in caustic alkalies. Tannin loses its property of coagulating albuminous bodies, when it is mixed with alkali, to the point of weak alkaline reaction. The alkaline tannate, so produced, has no longer an action upon albumen, but still possesses the characteristic astringent taste of unaltered tannin. The artificial digestion of albumen is not interfered with by the presence of tannin, which substance neither acts upon the peptone during its formation, or subsequently to that stage of digestion; nor does it precipitate pepsin. This behaviour is to be ascribed to the presence of free hydrochloric acid.

When a few drops of solution of tannin are added to blood, there forms, at the point of contact of the two fluids, a precipitate of tannin-albuminate, which disappears when the fluids are shaken up. If more of the tannin be added, a point is at length reached when the precipitate is no longer redissolved. This point corresponds to the disappearance of the alkaline, and the commencement of the acid reaction. Not only the albumen, but also the colouring matter of the blood, becomes altered on the addition of tannin; the blood showing, when examined with the spectroscope, the absorption-bands of acid hæmatin.

The antiputrefactive action of tannin was long questioned, since the substance itself in solution, after long keeping, decomposes. But it seems clear that such an action does exist. When a solution is added to putrid blood, the disagreeable odour disappears after a few minutes, and the mixture may be kept in an open vessel, exposed to the air for weeks, without undergoing farther decomposition. This action seems to depend upon the strong chemical affinity of tannin for albuminous substances, whereby the organisms of putrefaction are themselves seized upon, and their development hindered.

The outward application of tannin to the various tissues alters their physical characters. The connective tissue shrinks together and hardens. The muscles are so affected that their primary and secondary stretching are absolutely less than that of normal muscle; while, when the weight is removed, they return more exactly to their original length. This action upon the muscles takes place in the frog, whether the tannin be injected into the peritoneal cavity, or into the lymph-sac. The cause of this distant astringent action, after the subcutaneous injection of tannin, depends upon two factors: firstly, upon the energetic hygroscopic character of tannin, the abstraction of the water from the tissues rendering their cohesion and elasticity greater; and, secondly, and still more importantly, upon the power of tannin to take up oxygen. The alkaline tannate abstracts oxygen from the tissues, and thereby gives rise to the phenomena pertaining to deficient oxygenation, which, in the muscles of the frog, correspond exactly with the conditions to which the subcutaneous injection of tannin gives rise.

The absorption of tannin into the body takes place in the following manner: When the solution enters the stomach, it does not affect the peptones present, since they are in a solution of hydrochloric acid; but the fluid unaltered albuminous bodies are changed into a tannate of albumen, provided that there is no excess of dissolved albumen, or of lactic acid. The albuminate of tannin, if it be formed, becomes digested, and the tannin passes into the vessels. As it enters in small quantities, it dissolves in the alkaline blood or lymph, and circulates as a soluble alkaline tannate.

The following are some of the practical suggestions in regard to the administration of tannin, which may be derived from the observations contained in this very able paper: It is to be borne in mind that, when tannin enters the stomach, it forms with albumen precipitates, which, although soluble, require for their solution the presence of certain definite conditions (for example, excess of albumen, of lactic or of hydrochloric acid). If the albuminate of tannin be not soon dissolved, or if the tannin be given in the form of a powder, the solid particles adhere to the gastric walls, and produce extensive irritation of the mucous membrane. This occasions the most uncomfortable sensations, feeling of weight and heat in the epigastrium, loss of appetite, etc. In order to avoid this, the tannin should be given, either as a solution of albuminate of tannin, or as alkaline tannate. In any case, it should not be administered in the form of a powder. A solution of albuminate of tannin can be readily prepared in any concentration, if a solution of albumen be added to tannin dissolved in a little water, and the resulting precipitate redissolved by excess of albumen. Absorption is still more readily accomplished when the drug is given in the form of an alkaline solution, by the addition of sufficient carbonate of soda to render the reaction alkaline. Or, finally, a third rational method of administration consists in precipitating the solution of tannin by means of albumen, and adding sufficient carbonate of soda to dissolve the precipitate.—*London Med. Record*, May 15, 1881.

Medicine.

Tuberculosis and Scrofula.

In a recent communication to the Société Médicale des Hôpitaux de Paris, M. GRANCHER discussed this well worn, but ever interesting subject by the light of recent researches. He considers as primordial the vitreous degeneration, which Virchow attributes to reciprocal pressure of the cells, and Cornil to the primary obliteration of bloodvessels, but which he believes to be produced by a "dys-

trophy," attacking even the embryonal elements. The caseous nucleus, the giant-cell of tubercle, the lesion of caseous pneumonia, are formed on the same type as the granular. An inflammatory process, accompanied by exudation of fibrin, is developed round the already existing tubercular giant-cell. The microscopic or Köster's tubercle, or the elementary tubercle of Malassez, and the follicular tubercle of Charcot, are essentially characterized by having a giant-cell in the centre, upon which is a vitreous layer of epithelioid cells, and a second layer of embryonal cells. In this anatomico-pathological prototype are two elements, one fibrous and capable of hardening, the other capable of caseation. The characteristic of tuberculosis is a fibro-caseous neoplasm, of a nodular form, tending to become caseous rather than to become hard.

M. Grancher disputed the strange opinion that scrofula is nothing but a local tuberculosis, because the elementary tubercle of Köster is found there; but this never exists there except in an embryonic state; in tuberculosis only, it develops till it arrives at the adult stage, or that of the granulation type. If the giant-cell were sufficient to characterize tubercle, as Schüppel says, then not only scrofula, but even syphilis, and certain sarcomata, would be classed together. Between scrofula and tuberculosis there is only a slight relationship.

In the discussion which followed, M. Férrol remarked that M. Grancher would be more logical in defending the doctrine of the fusion of the two diatheses, as suggested by Friedländer in 1871, and adopted by Charcot in 1877. M. Brissaud, he said, frequently found even the granulation type in strumous deposits. Since scrofulous deposits engender miliary tubercles, why not admit that scrofula engenders tuberculosis? Certainly clinical experience was not opposed to that being the case. Tuberculosis would then be, only, a particular type of scrofula. M. Labbé insisted on the fact that frequently simple inflammations terminate in tubercle, apart from any apparent diathesis, especially after mental emotion, excess, and dyspepsia. M. Cornil has, far from being an unicist, considered that diseases differing in cause and their symptoms can give rise, at a certain period of their evolution, to similar anatomical productions. Tuberculosis is characterized by a constant neoplasm—tuberculosis granulation—of variable aspect according to its period of development, and by the general appearance of the lesions, their seat, and their evolution. Scrofula embraces, on the other hand, a series of very different morbid conditions, to which are added acute or chronic inflammations, of which the oldest tend to caseation, a termination which is also seen in syphilis, in sarcoma, and in chronic pleurisy. M. Grancher had insisted on the pathological anatomy of lupus being similar to that regarded by most as scrofula, in which, however, one finds again the primitive tubercle or tuberculous follicle, never the typical tuberculous granulation; but this last is not found in tuberculosis of the mucous surfaces. The symptoms, course, and evolution suffice to separate lupus from tuberculosis. A single morbid element cannot characterize a disease. Thus, the organism found in diphtheria resembles those of quite different affections; the false membranes of inflamed mucous patches, from which syphilis may be inoculated, are histologically similar to those of croup. M. Damaschino admitted the two diatheses. Scrofula is, as it were, a soil favourable for the growth of tuberculosis equally with other conditions of debility. M. Thaon was an unicist; he admitted the identity of scrofulous and tuberculous glands. Pulmonary tuberculosis, he said, is only scrofula of the lungs; but there is, as it were, an antagonism between the cutaneous or glandular manifestations of scrofula and the manifestations in the lungs. Scrofula, a diathesis of feebleness, attacks the points of least resistance. It is uncommon in the lungs of the mountaineer, fortified by, as M. Thaon said, "*gymnastique respiratoire*." Tubercle is a special not a specific inflammation, in miliary or voluminous foci, tending to caseation or to

fibrous degeneration, and the evolution of which is accompanied by fever. Nothing analogous to this is to be found in tumours, such as sarcoma or carcinoma. M. Labbé pointed out that Laennec regarded tuberculosis as a result of scrofula, the tendency of all debilitating causes, a malady acquired, and not diathetic. Scrofula, a constitutional vice, like all physiological debility, engenders, or at least predisposes to, tuberculosis. Pulmonary inflammation, narrowing of the pulmonary artery, aneurism of the thoracic aorta, and deformity arising from rickets, lung-disease produced by dust, etc., act in the same way. Tuberculosis is not a specific malady; the existence of tubercle gives it, however, a special character. Heredity of tuberculosis is not so undeniable as that of gout. M. Ferrand did not consider tuberculosis as a diathesis; equally with scrofula and with gout, it is a lesion appearing late in certain diatheses, but not special to any one of them. He did not deny, nevertheless, that it may be developed independently of any diathetic or constitutional disease. A scrofulous or a gouty person may become affected with tubercle, but a tuberculous person does not become scrofulous or gouty. Phthisis of scrofulous origin specially affects the mucous surfaces, and undergoes caseation. Consumption, in gouty persons, attacks the serous membranes, and develops into fibrous tissue. Pathological anatomy is not, at present, able to trace any natural affinity between tubercle and syphilis or glanders, any more than between these two last-named diseases. M. Rendu said that he was dualistic in his views, because, in his opinion, the scrofulous tumour does not exist, because the tuberculous follicle does not characterize tuberculosis, and because the giant-cell is not peculiar to tuberculosis. There is nothing characteristic in scrofula, unless it be "torpidity;" it is quite the contrary, however, in tuberculosis, to such an extent as to call to mind an infective, or even a parasitic, disease. This is more especially the case when one considers that it presents, as it were, foci of contagion of epidemic concentration; that its inoculation seems possible; and that it is frequently acquired. Regarding the points of resemblance between scrofula and tubercle, it can only be said that scrofula makes the body a favourable soil for the development of tubercular germs.—*British Med. Journal*, April 23, 1881.

Treatment of Typhoid Fever.

Dr. HALLOPEAU (*L'Union Médicale*, March 21) has been making a study of the treatment of typhoid fever by calomel, salicylate of soda, and sulphate of quinine. He has communicated his results to the Société Médicale des Hôpitaux, and his conclusions are as follows: 1. Salicylate of soda and sulphate of quinine generally exercise an appreciable action over the temperature of typhoid fever patients. 2. The action of salicylate of soda is not habitually continuous; at the end of two or three days, even when fresh doses are administered, new rises of the thermometrical curve are observed. As a rule, however, they only attain the initial figures in a temporary manner, and the centre of the thermic oscillations generally remains depressed. 3. Two grammes (31 grains) of salicylate of soda are, as a rule, sufficient to produce an antipyretic action. 4. In doses of 4 grammes and upwards, this drug seems capable of itself producing symptoms, and especially of increasing the dyspnoea, augmenting pulmonary congestion, favouring the tendency to hemorrhage, and sometimes inducing delirium and restlessness. 5. These accidents may be avoided if the salicylate of soda be given in doses of two grammes only, if it be not prescribed for more than three days successively, and if contra-indications be duly observed. 6. These contra-indications are especially thoracic complications, serious cerebral symptoms, and hemorrhage. 7. By prescribing sulphate of quinine and salicylate of soda alternately,

the centre of the thermic oscillations is most frequently maintained at a comparatively low figure. The pernicious effects of excessive temperature are thus avoided, and it would seem at the same time that a favourable action is exerted over the course of the disease. In this way, an equally powerful control is obtained over the temperature as with cold baths, without exposing the patients to the same accidents. 8. The antipyretic action of sulphate of quinine is produced even when that of salicylate of soda seems to be exhausted, and *vice versa*. The therapeutic effect of one is added to that of the other, but not their toxic effects. 9. Cold lotions, cold applications to the abdomen, and cold enemata, may be advantageously employed as accessories at the same time as the antipyretics. 10. In cases when hyperpyrexia persists, notwithstanding this treatment, the daily doses of sulphate of quinine may be increased to one and a half, two, or even three grammes. Four grammes of salicylate of soda may in like manner be given, provided that the dose be repeated not oftener than every second or third day, and that it be ascertained that the medicine is being eliminated by the urine.—*London Med. Record*, April 15, 1881.

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Gangrene of the Vulva in Typhoid.

Prof. SPILLMANN, of Nancy, terminates an article in the *Archives Générales* of March with the following conclusions: 1. Gangrene of the female genital organs, although rare, nevertheless constitutes one of the most serious complications of typhoid fever. 2. It may be manifested at first in the form of simple œdema, of an inflammation of the vulvo-vaginal glands, or of small superficial eschars confined to the labia. 3. In bad cases the gangrene appears in the humid form, extends over the entire vulva, and may even invade the vagina, the thighs, and the trunk. It often, under these conditions, terminates with symptoms of gangrenous infection. 4. The gangrene may also be confined to the vagina, and then often remains unperceived, and may, at a later period, give rise to stricture of the vagina, with retention of the menstrual discharge. 5. Vulvar gangrene is sometimes induced by a true local infection, and is then propagated by means of erosions or ulcerations of the vulva, or of excretory ducts of the vulvo-vaginal glands. 6. Syphilitic lesions of the vulva seem to easily undergo transformation into gangrenous centres when the patient is attacked by typhoid fever. 7. Gangrene of the vulva is always a serious complication, and in bad cases it proves fatal in two cases out of three. 8. The possibility of such complication should always be borne in mind; and hygienic precautions should always be put in force for all women who become the subjects of typhoid fever. In the adynamic forms of the disease a minute examination (*toilette minutieuse*) should be made daily. 9. Local antiseptic treatment should be put into force from the commencement of the complication. 10. The cicatrization of the wounds should be attentively watched.—*Med. Times and Gazette*, April 23, 1881.

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Sprue.

There are a multitude of diseases peculiar to tropical and subtropical countries to which the inhabitants are liable, and which foreigners may acquire when exposed to the corresponding morbid causes. There is another class of diseases peculiar to those countries, attacking foreigners, and but seldom, if ever, affecting the natives. One of the latter, known in India and well known in Java, where it goes by the name of sprue, has hitherto received little specific notice from medical writers, though, from its extreme fatality, it deserves careful study and attention. Sprue is defined by Dr. PATRICK MANSON, of Amoy, who has devoted much attention to it, as an extremely chronic and insidious disease peculiar

to warm climates, the principal symptoms of which are referable (1) to a remitting inflammation of the mucous membrane of the mouth and alimentary canal generally; (2) to diarrhœa and irregular action of the bowels; (3) to anæmia and general atrophy. Great wasting accompanies it, altogether out of proportion to the amount of diarrhœa. The victims have all a withered shrunken appearance. When the disease is of some standing, the patient is feeble, irritable, incapable of much mental effort, and anæmic. It is exceedingly insidious in its onset, and very slow in its progress. Dr. Manson has watched a case for several years. This chronicity is exceedingly characteristic; the patient can seldom say exactly when his disease began, nor, if interrogated from time to time, during its progress, can he say positively he is better or worse. It is only when comparison is made between the condition and weight of the patient at dates widely apart that the gradual and sure progress of the disease can be appreciated. The prognosis in a well-marked case must be grave indeed, unless the sufferer be speedily removed to a colder and more temperate climate. According to Dr. Manson's experience, so long as the patient remains under the conditions in which his disease was acquired, medicine and dietary, although they may do much to mitigate suffering, will not effect a cure; and, after one, two, or three years of suffering, there can be only one termination. As to the cause of sprue, Dr. Manson can only ascribe it to the general unsuitability of the European constitution to tropical climates. It is just possible that some accident to the alimentary canal may act as the immediate and exciting cause, and determine the advent of sprue in those constitutionally prepared by the warm climate and other predisposing influences. Nothing seems to have so powerful an influence in aggravating the disease, and therefore, probably, in inducing it, as long-continued high temperature. In his attempts at cure, Dr. Manson has tried many drugs; but they have one and all disappointed him; and he has come to the conclusion that there is only one remedy for sprue (viz., leaving the country); and that, to be effective, should be tried early in the disease. Is not "sprue," after all, a form of "idiopathic" or "progressive pernicious" anæmia, as described by Dr. Coupland in his lectures now in course of publication in this Journal?—*British Med. Journal*, April 2, 1881.

Leukæmia.

Professor W. LEUBE and Dr. R. FLEISCHER (Virchow's *Archiv*, Band lxxxiii. Heft 1) publish the case of a strong and healthy woman who developed in four months, after a normal confinement, all the symptoms of rapidly advancing anæmia: diminution of strength and nutrition, vertigo, headache, loss of appetite; at the same time pain and swelling occurred in the left lower extremity, which disappeared only after some time. Five weeks later, examination showed only extreme anæmia, with blowing murmurs over the heart, and a small, easily compressible pulse; no obvious enlargement of liver, spleen, or lymphatic glands. The number of the red corpuscles was notably diminished; that of the white corpuscles was absolutely and relatively greatly increased. The left tibia and tarsus were painful on pressure. The left leg was amputated above the knee for rapidly spreading gangrene. The patient died six days later. The necropsy showed intense anæmia of all the internal organs; advanced degeneration of the heart's muscle; no changes of the liver, spleen, or lymphatic glands; a chronic gastric ulcer. Red hyperplastic marrow was found in the bones, with numerous nucleated red blood-corpuscles (transition forms) and numerous marrow-cells. This lymphoid red process in the marrow has been found by Neumann and others in various cachectic conditions, and is regarded as being the consequence of the anæmia. They conclude that either this process must occasionally and

exceptionally give rise to a great development of white corpuscles as in this case, or it must be admitted that the source of the leukæmia cannot always be discovered in the usually recognized blood-forming organs, but that the disease must be regarded as an independent blood disorder.—*London Med. Record*, April 15, 1881.

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Epidemic of Sweating Sickness.

M. JULES ROCHARD has reported (*Le Prog. Méd.*, No. 10) to the Academy of Medicine on the epidemic which occurred in the island of Oléron during the summer of 1880. The disease began in June in the village of Allards, and remained there till the 2d July, during which time there were five deaths. In July a death occurred in a neighbouring village, and became the cause of a new epidemic. The disorder was the sweating sickness, characterized by its sudden onset, special eruption, and grave symptoms. The cases became so numerous that the two doctors on the island were unable to fulfil the requirements of the situation, and two naval surgeons were sent to assist. The disease spread all over the island. No medical man was attacked. The contagion seemed to emanate from the corpses; putrefaction set in very early. The coffins were made very badly, and the products of decomposition probably escaped and contaminated the clothes of those who carried the coffins to the cemeteries; hence the frequency of the disease among these. According to Magnel, the temperature is 41 deg., 42 deg., and 43 deg. Cent. (105.8 deg., 107.6 deg., and 109.4 deg. Fahr.), but in this epidemic such high figures were not noticed. At the commencement it reached 39 deg. Cent. (102.2 deg. Fahr.), and remained at about 37 deg. and 38 deg. Cent. (98.6 deg. and 100.4 deg. Fahr.), while in cases where the sweating was suppressed it reached 41 deg. and 42 deg. Cent. The treatment consisted of ipecacuanha in doses of 1½ grammes (22 grains). Refrigeration gave good results in some cases of high temperature.—*London Med. Record*, April 15, 1881.

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Antiseptic Treatment of Diphtheria.

Dr. WEISE (*Berlin. Klin. Wochenschrift*, 1881, No. 4) advocates the adoption of the following measures in the treatment of diphtheria. He prescribes a solution of salicylic acid, consisting of one part of salicylic acid and twenty-five parts each of rectified spirit and glycerine. This, although a strong solution, is quite free from danger. The spirit, he explains, is used because, in former cases, benefit was derived from the local application of brandy to the throat; and the glycerine is added to obtain a less irritating solution. If the patient can gargle, the author employs a 1 in 300 salicylic acid gargle. Should the attack be very severe, he prefers a solution of benzoate of soda, 1 in 40, or even stronger. Coincidentally with this treatment, he gives Hungarian wines. He pays particular attention to maintaining the patient's strength, and orders nourishment to be taken constantly, in the form in which it can be most readily assimilated. He speaks highly of Rosenthal's extract of meat mixed with yolk of egg, but gives solid food if it can be borne. His directions are somewhat as follows: At one o'clock, paint or gargle the throat with the salicylic acid solution; at half-past one, give a teaspoonful of Hungarian wine; at two, the benzoate of soda; at half-past three, a teaspoonful of Hungarian wine; and, during the next half-hour, more gargling with salicylic acid; the treatment being continued night and day without intermission, except that at night the intervals may be an hour, instead of half an hour. If possible, he employs a special apparatus of his own—a combination of tongue depressor and spray. This, by reaching the back of the tongue, admits

a thorough examination with the simultaneous application of an antiseptic. In a few seconds, the whole throat can be washed out with the salicylic acid solution; and this is very necessary in preventing the spread of the disease. Moreover, by this method, bleeding may be speedily arrested. Sometimes he employs a 5 per cent. solution of carbolic acid as a spray.—*British Med. Journal*, May 7, 1881.

Transient Albuminuria.

Albuminuria without structural disease of the kidneys—a symptom of considerable interest and of much practical importance—was the subject of a recent communication by Professor BAMBERGER to the *Vienna Gesellschaft der Aerzte*. “Temporary albuminuria” it is often termed, but he suggests that “hæmatogenic” would be a more accurate term as contrasted with “nephrogenic” due to organic renal disease. This functional albuminuria is often trifling in amount, causing merely opalescence of the urine under the ordinary reagents, but the amount of albumen is sometimes considerable. It may occur in individuals apparently in perfect health, as Ultzmann and Leube showed, and their observations have since been amply corroborated. It occurs also in febrile conditions, apparently as a result of the blood state, although standing in no direct relation to the pyrexia. Passive congestion and epileptic attacks also cause it. It is found in the convulsions from strychnine poisoning, but never in the abundant watery urine of hysterical states.

What is the origin of this albuminuria? An answer can be best given to this question by asking another. Why is not albumen always present in the urine, since all capillary vessels allow albumen to pass through their walls, and it would be remarkable if those of the kidney were any exception to the rule. Wittich put forward the theory that the urine which passes through the capillaries of the Malpighian bodies is always albuminous, but that its albumen only serves to nourish the epithelial cells of the urinary tubules, and that the albumen which is not thus used passes back into the circulation. This theory presents the difficulty that it assumes that the epithelium of the kidney is nourished in a different way from all other epithelium, but it has the support of the pathological fact that when the epithelium is removed from the kidney, albuminuria occurs. And yet, on the other hand, intense fatty degeneration of these cells may exist, as, for instance, in phosphorus poisoning, and no albumen may appear in the urine; while in cases of transient albuminuria, in which, for instance, albumen appears in the urine after an epileptic fit, it is not conceivable that this explanation will suffice. Rosen has brought forward an experimental objection to Wittich's theory. He placed small fragments of fresh kidney in boiling water, and thus fixed the albumen in the position in which it was produced. In diseased kidneys he found coagulated albumen in the urinary tubules, but he never found it there in healthy organs.

Physiologists assert that albumen is retained in the kidneys on account of the pressure-conditions of the circulation; the pressure is sufficient to lead to the transudation of water and saline substances, but not of albumen. It may be asked, however, How does the pressure here differ from that in other capillary vessels? The size of the renal arteries in proportion to the organ, the structure and arrangement of the capillaries, all point to a high blood-pressure in the kidneys, a condition in which substances only slightly filtrable should readily pass through, albumen among them. Heidenhain goes further, and asserts that nothing of the nature of filtration occurs in the kidney, basing his assertion on the relation which the amount of urea bears to the quantity of urine.

Another explanation which has been given is that the epithelial covering of the smallest renal capillaries keeps back the albumen. Mucous membranes only allow the escape of an albuminous fluid when they are denuded of their epithelium. This theory, however, holds good only for the living kidney; albumen passes out of the kidney after death in spite of the epithelium. Moreover, the epithelium is not equally retentive of all varieties of albumen; egg-albumen, for instance, injected into the vessels rapidly passes out in the urine; serum-albumen does not, while the albumen of red blood-corpuscles, the hæmoglobin, rapidly passes out in the urine if the corpuscles are destroyed.

Runberg has asserted that the amount of albumen which passes through animal membranes varies inversely as the pressure; the lower the pressure the greater the amount of albumen. Hence he believes that when albuminuria is not dependent on structural alterations in the kidneys, it is to be ascribed to the diminution of pressure in the Malpighian glomeruli. He thus accounts for the albuminuria of mechanical congestion of the kidney, in which the blood-pressure in the aortic system is commonly much lowered. The diminished quantity of urine in this condition supports this theory, and also the beneficial influence of digitalis as a remedy for the condition. Febrile albuminuria he ascribes to the same mechanism, the lowered blood-pressure from the enfeebled state of the heart. He has not, however, sufficiently distinguished the influence of the two important factors in the circulation, the pressure and the rapidity of the movement of the blood. In order to ascertain afresh the influence of the first of these factors, Bamberger has performed the experiment of stretching two similar membranes (amnion or pericardium) over cylinders, and allowing equal quantities of albuminous fluid to filter through them, with and without the pressure of a layer of oil poured upon the top. In the first experiment he took some pleuritic fluid, which contained 1.174 albumen. He found that in the cylinder in which the pressure was the greater, the absolute quantity filtered and the absolute amount of albumen were greater, but that in both instances the percentage of albumen in the total filtrate was the same. A second experiment with ascitic fluid containing a large amount of albumen gave similar results. Quite recently Gottschall and Hoppe-Seyler have performed similar experiments, and have obtained the same results. Runberg's theory thus also becomes untenable, and there are other experimental objections to it. When the renal arteries are tied the blood-pressure falls considerably, but the kidneys become congested, and blood and albumen at once appear in the urine. Moreover, in febrile states, the albumen often appears a few days after the commencement of the pyrexia, and while the pulse is still full and bounding. Neither an increase nor a diminution of the blood-pressure will alone account for the transudation of albumen. The only other condition to which it can be referred is the retardation of the blood-current. Albumen is slowly filtrable, and may only pass through when it remains for a comparatively long time in contact with the wall of the vessel. The same relation is seen in inflammation, in which first there is a retardation of the blood current, and then the exudation of an albuminous fluid. This, however, is probably not the only factor. The epithelial cells of the Malpighian glomeruli may lose their function without presenting any anatomical alterations—a hypothesis which can be neither established nor disproved. Another factor is the vaso-motor action, consisting in either paralysis of the vaso-constrictors or irritation of the vaso-dilators. By dilatation of the vessels a retardation of the blood current can readily be produced. In this way the origin of the febrile albuminuria can be readily understood, since vaso-motor disturbances are frequent in that condition, apart from any direct relation to the amount of pyrexia. If the whole nervous system, and therefore also the vaso-motor system of the kidneys, is

deranged by an epileptic attack, albuminuria may readily rise in the same way. The same explanation—the hypothesis of a slight vaso-motor disturbance—affords also the most ready explanation of the occasional albuminuria of apparently healthy individuals. At the same time, the possibility of chemical changes in the circulating albumen must not be forgotten. Under some conditions albumen is probably formed which behaves in the same manner as egg-albumen or paraglobulin, and, unlike serum-albumen, filters easy, and may thus appear in the urine. This fact, indeed, renders it doubtful whether the phenomena are to be explained at all by the mere physical conditions. We know nothing of the reason why the different kinds of albumen are excreted with various degrees of readiness, and whatever condition is the cause of this difference may also, when deranged, be the source of the temporary albuminuria which still constitutes so great an enigma.—*Lancet*, March 19, 1881.

Menière's Disease.

DR. EDWARD MENIÈRE has just published a memoir on the disease described by his father in 1861. Menière's disease is constituted by three principal symptoms: 1. The noises or whistlings which precede the crisis; 2. The vertigo, accompanied by nausea and vomiting; 3. Deafness, as a rule incurable. The writer of the memoir details at length the treatment of this disease (*La France Méd.*, p. 239), in which he follows the method proposed by Professor Charcot. The patients take after their meals pills composed of 10 centigrammes of sulphate of quinine and 10 centigrammes of fluid extract of cinchona. He thus commences with 30 centigrammes of sulphate of quinine, and goes progressively up to 70 and 80 centigrammes, and even 1 gramme; then he enjoins absolute abstinence from it during a fortnight, three weeks, or even a month, but recommences during the first period of a month, giving 40 centigrammes at first setting off. The effect of the quinine is to diminish and cause the vertigo to disappear, and, on the other hand, to modify the deafness. M. Menière does not pretend to formulate a curative treatment of a disease against which all the resources of therapeutics have hitherto been unavailing, but quinine has, at least, the advantage of calming the most troublesome symptoms.—*London Medical Record*, April 15, 1881.

Paralysis of Hands and Feet from Diseases of Nerves.

DR. T. GRAINGER STEWART reports (*Edinburgh Med. Journal*, April, 1881) three interesting cases, closely resembling one another, the most important clinical features of which were the coexistence of symptoms referable to the sensory, the motor, and trophic functions of the nerves, the localization of the symptoms in the feet and hands, the intensity being greatest at the most distal points, and the affection corresponding to certain districts of the extremities, and not to the distribution-areas of particular nerves; the symptoms depending on a lesion of the nerves themselves, and in his opinion due to a healing of the axis cylinder. Similar cases have been described by Duménil, of Rouen (*Gazette Hebdomadaire*, 1864 and 1866), Bablon (*Ibid.*, Dec. 1864), Eichhorst (*Virchow's Archiv*, Bd. 69), Eisenlohr (*Centralblatt f. Nervenheilkunde*, 1879), Joffroy (*Archives de Physiologie*, vol. vi. p. 172), and Leyden (*Zeitschrift für Klin. Med.* 1880).

Dr. Stewart finds that "from the facts observed in the cases which I have recorded, taken along with those recorded by others, and with some which, looking back, I now regard as examples of this condition, I find data for drawing up

a clinical history of the disease, which seems to me quite distinctive. Its commencement is usually acute and attended by more or less fever. While all the functions of the nerves speedily become affected, it is in connection with the sensory functions that the first changes manifest themselves. Sometimes there is acute pain, but oftener a numbness or peculiar tingling sensation in the affected parts, closely resembling the feeling popularly known as sleeping of the limb—a feeling which is more like this from the circumstance that action of the muscles or pressure upon the skin induces the uneasy or painful sensation commonly known as pins and needles. Along with this there is a distinct diminution of sensibility. Touch is felt indistinctly; two points so far removed from one another as to be distinguished in the healthy conditions are no longer distinguished, and the patient may have the greatest difficulty in localizing the impression which he feels. Sensory impressions are conducted slowly, and at the same time contact is felt painful. These feelings may begin simultaneously in the fingers and in the toes, or may affect first the one and then the other. It seems to be usually in both hands and both feet simultaneously, but not necessarily in an equal degree.

To these sensory changes motor symptoms speedily become superadded. At first there is mere paresis, and affecting the most distal parts; but the paresis spreads up the limb from one group of muscles to another, and as it does so the intensity of the process deepens in the parts first affected. The organic reflexes are very rarely affected, although when the disease spreads upwards it is sometimes found that those connected with the bladder, and perhaps the bowel, are involved. The skin reflexes are modified in proportion to the diminution of sensibility in the parts, being sometimes entirely absent, sometimes absent on slight stimulation, but present even in an exaggerated degree when a strong stimulus is applied. The plantar reflex is often altered, while those higher in the body are natural. The tendon reflex, and especially the patellar tendon reflex, appears to be early and completely lost in these cases. Ankle clonus may be present after the patellar tendon reflex is lost. With regard to voluntary motion, it is found that in some of the muscles it is absolutely lost; in others it is diminished to a greater or less extent. Within a week of the commencement of the seizure it may be found that the patient has no power of flexing or extending the toes and fingers, but retains power of movement of the ankles or the wrist. A week or two later these movements also have become lost, and ere long perhaps the legs and arms in their whole extent are absolutely helpless. There is no special interference with the co-ordinating functions. With regard to the reaction of degeneration, I have not been able to satisfy myself in the cases which I have observed.

The vasomotor and trophic changes manifest themselves most distinctly in the muscles which undergo atrophy—much more rapidly than would be the case in simple motor paralysis. The colour and texture of the skin, also, sometimes change from the normal, patches of congestion or of blueness appearing here and there, and glossiness manifesting itself, especially in the fingers. The nutrition of the nails also becomes altered. In several of the cases I have seen a very distinct degree of œdema not referable to any other than a nervous cause. The intelligence is perfect, and sleep is satisfactory except in so far as it may be disturbed by pain. There is no alteration of the condition of the spine or cranium.

The process may take some weeks, or perhaps months, to arrive at its full development. After a time it appears usually to become arrested, but at first no improvement is manifested. Gradually, however, the patient begins to notice some improvement. His pains or uneasy feelings diminish, sensitiveness to impressions increases, and he begins to feel that his power over the muscles is

returning. It is in the upper part of the limb that improvement first sets in. It gradually passes downwards, until at length there is complete recovery. The process may occupy a period of from two to six or more months.

The recovery from such a condition as this seems to be most remarkable. It would appear to one examining the lesion as if it must necessarily permanently destroy the nerve; and yet we must assume that recovery does actually take place, and that in no inconsiderable proportion of the cases. But what is even more remarkable is, that the process may recur in the same individual and in the same parts time after time. I have met with at least one case in which this apparently occurred three successive times within a few years.

In some cases, probably, the disease extends to involve the cord, and perhaps to pass into myelitis.

The superaddition of any acute disease must be regarded as most formidable where this disease exists. But while recovery occurs in a considerable proportion of cases, it is not the invariable result. In some the process induces permanent atrophy of the nerves, with consequent paralysis. In others extension of the disease may take place, and vital nerves or vital nerve centres becoming affected, death must follow. Further observation will show the proportions in which these various results occur.

I have no doubt that it will occur to many of you that probably in this disease we find the means of explanation of cases which we have regarded vaguely as spinal congestion, slight myelitis, or such like; and I expect that it will prove that cases of this kind are not very uncommon. I, at least, on looking back, can recall some in which I think I should now find the explanation by reference to this process.

If it be true that in some instances fibres of all kinds in mixed nerves may be thus affected, it seems reasonable to believe that in individual mixed nerves either the motor fibres alone, or the sensory fibres alone, might be the seat of change. And if so, we should expect to find in the former a clinical history closely resembling Landry's acute ascending paralysis; in the latter, certain forms of neuralgia with loss of sensibility.

It remains for me to mark off the clinical history thus sketched from those proper to some other affections with which, at first sight, it might be confounded. It resembles at first sight and in some respects the Acute Ascending Paralysis to which I have just referred, which was first described in 1859 by Dr. Landry. In it there is paralysis commencing at the distal parts and spreading upwards, sometimes terminating in recovery, sometimes extending to vital centres and so proving fatal. In the cases which do prove fatal no lesion has been found. The disease which I am bringing before you to-night differs from it in that it affects the sensory as well as the motor functions, and exhibits well-marked pathological changes. But the processes may, on further examination, turn out to be related to one another in the way I have just suggested. It also very naturally suggests the form of disease which was described in 1853 by Duchenne under the name of General Spinal Paralysis, and which he afterwards spoke of as Anterior Spinal Paralysis, acute and subacute, in which the lesion was more accurately defined by Charcot and Joffroy, and which has been termed by Kussmanl and Erb, Polio-myelitis anterior, by Westphal, Acute Atrophic Spinal Paralysis of adults, and by Eulenberg, Acute and Subacute Spinal Paralysis of adults. In that disease the lesion is situated in the anterior horns of gray matter, and the clinical features are well defined. Commencing generally acutely with some degree of febrile disturbance, there is developed paresis of the limbs, which rapidly passes into paralysis with speedy wasting of the muscles. It spreads from the legs upwards. The same process may occur in the arms; it may, indeed, begin in the

two places simultaneously, gradually advancing in the trunk as the cord becomes more extensively affected. The process may extend to vital structures and prove fatal, or it may become arrested and complete recovery take place, but throughout the course of the disease there is no affection of the sensory functions. Peripheral Paralysis of the kind we are describing differs from it in that it affects the sensory as well as the motor and trophic functions, and that it is so distinctly ascending in the limb it involves, while pathologically the changes are essentially different; and thus, although one of the most careful and distinguished of living workers in neurology, Professor Leyden of Berlin, draws special attention to the resemblance between them, it is yet clear that they are to be readily distinguished from one another.

There should be little tendency to associate this disease with Acute Transverse Myelitis, a malady in which the whole of the strands of the cord are diseased at the same point, for in that disease it commences to manifest itself at once at all points below the seat of disease, and does not spread upwards, as in our malady; moreover, in myelitis there is a marked tendency to alterations of the organic reflexes, to sloughing of skin, alkalinity of urine, and vesical catarrh, none of which occur in the malady we are considering.

Certain forms of diphtheritic paralysis more or less closely resemble the disease under consideration; but they may be readily distinguished by the fact that there is no history of any throat affection, no tendency to paralysis of laryngeal or pharyngeal muscles, nor is the distribution of the malady at all like what is seen in post-diphtheritic cases. It is interesting to remember in this connection that in some cases of diphtheritic paralysis Charcot and Vulpian have found a distinct lesion of the nerves of the affected parts, and that this has been confirmed by others. It will be interesting to ascertain how close the resemblance between them may be.

One of the main points of interest in connection with this disease is the light which it appears fitted to throw upon some obscure questions in nervous pathology; among these I may mention Locomotor Ataxia. You are all aware how frequently that disease is heralded by passing nervous attacks of various kinds, sometimes paralytic, affecting one nerve or some particular branch of a nerve, and generally after a time disappearing, but sometimes persisting. Such paralyzes may be best explained by assuming them to be due to this disease. But, again, girdle pains often appear as an early symptom, and may be also quite reasonably referred to such a malady, for the girdle pain is usually associated with hyperæsthesia, and while it sometimes entirely disappears, it sometimes also produces a permanent anæsthesia of the region affected. Another very distressing symptom is that which is known as "lightning pains," which may be due to disease of the sensory fibres; and in cases of locomotor ataxia it must have struck many observers how strangely pain, hyperæsthesia, and anæsthesia may come and go in certain parts in a way that seems scarcely explicable unless on the hypothesis of local nerve change. In regard to the eye changes, the temporary and passing amauroses, and other symptoms connected with special sense, I may refer to some facts recorded by Dr. Althaus.¹ Having referred to the optic neuritis as being well known in association with Locomotor Ataxia, he gives cases in which the olfactory and auditory nerves were the seat of disease, resulting in alteration or destruction of the functions of these nerves.

It is interesting to know that while, from clinical considerations, I was led to this view of these symptoms, Dr. Hamilton has been led in the same direction by

¹ Althaus "On the Pathology of Peripheral Nerve Disease," American Journal of the Medical Sciences, 1879.

his pathological observations. It has, indeed, long been known that atrophy of cranial nerves occurs in the course of locomotor ataxia, but what I have brought before you to-night is fitted to clear up our conceptions on the matter.

Another point of practical interest is the light that this may be fitted to throw on the beneficial effects of nerve-stretching. The demonstration of such changes as these may be followed one day by proof that some allied change exists in the axis cylinder of nerves in the cases which are benefited by nerve-stretching. And taking together what we have said regarding locomotor ataxia and this plan of treatment, the thought will naturally occur that we may herein find the explanation of the marvellous results of nerve-stretching recently described as having occurred in that disease.

With regard to treatment I cannot as yet speak very positively. Certainly strychnia seems injurious in the early stage and beneficial in the later, while ergot of rye seems to be useful in the early periods. It remains to be seen whether nerve-stretching is applicable or not at any stage. Many remedies may be useful for relieving pain—quinine, salicylic acid, salicylate of soda, morphia. During the period of advance the patient should be kept at rest. When the acute stage has passed, friction, electricity, passive and then active exercise, should be carefully tried.

Histology of Spinal Paralysis of Children and Progressive Muscular Atrophy.

MM. ROGER and DAMASCHINO (*Revue de Méd.*, Feb. 1881) contribute an exhaustive paper on this subject, and from abundant evidence arrive at the following conclusions. 1. The characteristic alteration in infantile paralysis is a spinal lesion, causing atrophy of nerves and muscles. 2. Its seat is in the anterior part of the gray matter, and it shows itself as softened patches. 3. The softening is of inflammatory origin, and the lesion is, therefore, a myelitis. 4. Progressive muscular atrophy consists essentially in atrophy of the motor-cells, without any patches of inflammatory softening.—*London Med. Record*, April 15, 1881.

Iodine as a Specific in Croupous Pneumonia.

Iodine or iodide of potassium is, according to SCHWARZ (*Deutsche Med. Woch.*, Band vii. No. 2, 1881), a specific in simple uncomplicated croupous pneumonia. If given during the first twenty-four to thirty-six hours from the onset of the initial rigor, it will arrest the further progress of the disease. In illustration of this view, ten cases are recorded in which the crisis occurred before the end of the second stage, and in one case at the end of the first day. The following are the formulæ adopted by Schwarz: Tincture of iodine, five drops; water, 120 grammes (4 ounces); one tablespoonful hourly. Iodide of potassium, $1\frac{1}{2}$ grammes (22 grains); simple syrup, 30 grammes (1 ounce); water, 120 grammes (4 ounces); one tablespoonful hourly.—*London Med. Record*, May 15, 1881.

Steatosis of the Liver.

Upon this subject, to which Prof. VERNEUIL has frequently alluded, he delivered an interesting clinical lecture, at the Pitié, which is reported in the *Gazette des Hôpitaux* (March 3), under the heading "Pathological and Physiological Steatosis of the Liver in Large Suppurations and Pregnancy."

I return, he says, intentionally to the case of a patient about whom I have already spoken to you, and who died six days after I had performed amputation of the thigh. I return to the case because we have found a visceral lesion which I had diagnosed during life, and of which you must take account in deciding the

question of operating; indeed, I shall always call your attention to it whenever the opportunity offers itself. This man, whose knee-joint had been opened, and in whom there existed very extensive suppurations, consequent on burns, was condemned beforehand to certain death; and the operation, performed at his reiterated supplication, did him neither good nor harm. Without dwelling on the diseased state of the bloodvessels and the commencing fatty degeneration of the heart found at the autopsy, there is to be noted the fatty degeneration of the liver which is the result of the existence of vast suppurations. Whenever, in fact, you see a patient who has been long in the hospital, a prey to constant and abundant suppuration, seized at a given moment with intense diarrhœa which is not of a renal origin (that is, if no anterior lesion of the kidneys has existed), you may boldly pronounce it of hepatic origin. More than this, if the diarrhœa becomes complicated with œdema of the lower extremities, when there is no disease of the heart or kidneys, this œdematous condition is an additional sign of the hepatic lesion.

I may refer to another patient in the hospital, who is in the same condition as the other, and who in all probability will shortly die. This woman, still strong and vigorous prior to her last confinement, entered the hospital six weeks after that had taken place, with symptoms which were at first considered to be due to phlegmon of the iliac fossa, but which eventually proved to be a deep-seated, ossifluent abscess proceeding from the hip-joint. As in the former case, this woman became pale and wan; she has lost her appetite; both her legs are œdematous; and for some days past she has suffered from an invincible diarrhœa. At the same time the urine exhibits no alteration, and the heart is healthy; and there certainly is here steatosis of the liver, which, on the one hand, is the result of prolonged suppuration, and, on the other, prevents the wound cicatrizing. The patient will finish by sinking from exhaustion. But, in her case, why and how did this steatosis arise? Pregnancy, as is well known, entails a steatosis of the liver which may be termed natural—a physiological steatosis, which disappears with the cause that produced it. This fact is completely recognized and proved by researches made on the females of mammalia; and this normal phenomenon explains the pyogenic tendency of recently delivered women, similar to that of all individuals having a fatty liver. This patient, then, has retained her physiological steatosis—a steatosis which later on became pathological, and which has continued to increase daily since the formation of the abscess, and the suppuration to which this has given rise. This patient will certainly succumb to this fatty degeneration of the liver, whether she dies from exhaustion and famine, or is carried off by some complication supervening at a later period. Such complications in steatosis of the liver most frequently are met with in the serous membranes, which have a great tendency to become implicated, whether it be the pleura or, more probably in this case, the peritoneum.

After recapitulating the phenomena of the two cases in the order of filiation, which is always observed in such, Prof. Verneuil observes that the lesson to be drawn from facts now so well established is to operate as seldom as possible on patients who are subjects of steatosis of the liver, although this is not a formal contra-indication in every case, the exception confirming the rule. Thus, in a case of comminuted fracture of the leg, after every attempt had been made to save the limb in vain, amputation was performed in spite of the well-ascertained existence of steatosis of the liver, which increased proportionally with the suppuration. After the operation, the pus having diminished, the condition of the liver was ameliorated, and the steatosis progressively disappeared as cicatrization advanced.

“Steatosis of the liver thus plays a great part in the results of surgical operations.”—*Med. Times and Gaz.*, April 23, 1881.

Surgery.

Treatment of Syphilis by the Subcutaneous Injection of Mercurial Solutions.

M. TERRILLON records (*Bull. et Mém. de la Soc. de Chir.*, 1880, p. 534) the results of experiments made at the Lourcine Hospital with the solution of peptonized mercury recommended by Bamberger. The solution is made as follows: Take a 5 per cent. solution of corrosive sublimate in distilled water, and a solution of chloride of sodium (18 to 20 per cent.) also in distilled water. Dissolve one gramme (15 grains) of flesh peptone in 50 cubic centimetres of distilled water, and filter. To the filtrate add 20 cubic centimetres of the sublimate solution, and afterwards a quantity of the sodium solution (about 15 or 16 cubic centimetres) sufficient to dissolve the precipitate. Pour into a graduated cylindrical vessel, and add distilled water until the whole measures 100 cubic centimetres. Cover the vessel and let it stand for a few days. A whitish flocculent precipitate will form, and must be separated by filtration. The solution will then keep clear for at least three months, and is not precipitated by heat, acids, or alkalis. With this solution M. Terrillon has made 487 injections of 1 cubic centimetre each, containing 1 centigramme (about $\frac{1}{4}$ th grain) of peptonized mercury; and 88 injections of about half that quantity. A Pravaz's syringe with vulcanite mounts was used. The dorsal region was preferred for the site of the injection, which was performed slowly, and the diffusion of the solution was assisted by slight kneading with the finger. In no case did abscess occur. The larger dose sometimes caused more or less prolonged pain about the seat of injection; and in one case, after a large number of injections, partial anæsthesia followed. The smaller dose never caused pain or other inconvenience. Salivation was produced in several cases after four or five injections of 1 centigramme repeated daily; and examination of the urine some hours after the injection showed the presence of mercury in it. M. Terrillon reserves his report of the therapeutic action of this mode of treatment for a future occasion, as the patients have not yet been sufficiently long under treatment for a trustworthy conclusion to be arrived at.—*London Med. Record*, April 15, 1881.

On the Prophylactic Treatment of Ophthalmia Neonatorum.

PROFS. CREDÉ, of Leipzig (*Archiv für Gynäkologie*, Bd. xvii. Hft. 1), R. OLSHAUSEN (*Centralblatt für Gynäkologie*, 1881, No. 2), and D. HAUSSMANN, of Berlin (*Ibid.*, No. 4), agree in the necessity of prophylaxis against this disease, in all lying-in institutions, at any rate, but differ somewhat as to details. Crédé commenced by treating the eyes of children born of mothers who had a vaginal catarrh, first with 1-60 boracic acid solution, which failed, and then with two per cent. nitrate of silver solution, following this by washing the eyes frequently for twenty-four hours with two per cent. solution of salicylic acid. Encouraged by his success, but finding that the children of apparently healthy mothers occasionally took the disease, he treated all cases, and instead of washing the eyes with salicylic acid, he secured them for twenty-four hours with a bandage wetted with the solution. By these means he reduced his percentage of the occurrence from 13.6 to 0.5. The single case that went to make up this latter percentage was one where the treatment had been omitted. Olshausen, working at the same subject and at the same time, used a one per cent. solution of carbolic acid, which he pencilled over the eyes after birth, and thereby reduced his cases from 12.5 per cent. to 6 per cent.; but latterly he has commenced treatment before the complete birth of the child, first pencilling the eyelids before they had

been opened, and then washing the surface of the eye with a fresh piece of wadding, 1 per cent. carbolic solution being used for both purposes. In this way he has brought his cases down to 3.6 per cent. He also observes that the cases that have occurred have been much milder than were those before prophylaxis was practised, never going the length of ulceration of the cornea, and frequently only one eye being affected. He suggests that a 2 per cent. solution might be more efficacious. To guard against the infection of a sound from an affected eye, he recommends that the child should always be laid on the affected side, and that its hands should be tied. The use of a bandage he disapproves of. Haussmann, while agreeing with the others, recommends the use of antiseptic vaginal injections, especially in malpresentations and operative cases, as there is then a greater chance of the eyes being partially opened during birth.—*Edinburgh Med. Journal*, May, 1881.

Diabetic Cataract.

Dr. GALEZOWSKI contributes to the *Recueil d'Ophthalmologie*, August, 1880, an interesting paper on diabetic cataract, with the history of five cases of successful extraction. He commences by remarking that diabetic cataracts are of two kinds, viz., those which depend on the presence of sugar in the blood, but more especially in the aqueous humour; and those which, occurring in diabetic subjects of a certain age, are simple coincidents, and do not stand in the relation of cause and effect. Diabetic cataracts, according to the author, depend on the presence of saccharine matter in the aqueous humour rather than in the blood and tissues, and are more frequently to be met with in plethoric than in thin subjects. As to the consistency of such cataracts, it will vary according as they are simply senile, or are dependent on the presence of glucose, and no hard and fast line can be laid down. From his own researches, he is led to suppose that it is more especially at the posterior segment that diabetic cataracts commence; but they also occasionally arise simultaneously in one or more of the anterior and posterior layers, forming a sort of envelope around a transparent nucleus. As to the prognosis of operation in such cases, it is by no means so desperate as some authors have taught. A very careful opinion must, however, be given as to the amount of sight to be ultimately recovered, seeing that amblyopia, retinitis, atrophy of the papilla, paralysis of the sixth pair, and other complications, occur even more frequently than cataract in diabetic subjects. Thus, in 108 diabetic patients suffering from disturbance of vision, only 37 had cataract. As to the best method of extraction, the author holds that, while for soft cataracts the linear method may be allowed, for the hard, the only proper one is the peripheral flap operation with iridectomy. The author sums up by saying that the existence of glycosuria should not be looked on as in any way a contraindication, so far as an operative interference is concerned; but that in all cases, both before and during the operation, extreme caution and a strictly antidiabetic regimen are necessary.—*London Med. Record*, April 15, 1881.

Treatment of Detachment of the Retina.

In an interesting paper on the treatment of detached retina, Dr. DIANOUX (*Archives d'Ophthalmologie*, Dec. 1880) insists on the therapeutic value of injections of pilocarpine. He publishes a series of eight cases, in seven of which the improvement which followed this course of treatment was remarkable. The first case occurred in a girl aged 21, very myopic, whose left eye was blind, while the right could do little more than distinguish light from darkness. In the right the retina was almost wholly detached, except a small crescentic portion superiorly.

Within the first week of treatment the improvement was most marked, and continued to increase during nine months subsequently, until, with -10 D, vision was $= \frac{1}{5}$ for distance, and for near objects the finest type was legible. The second case occurred in a man aged 34, the sight of whose left eye had been previously lost by a detachment of the retina. The right eye was subsequently affected, and sight was reduced to counting of fingers at two metres. The inferior and external portion of the field alone remained. Six weeks after treatment vision had improved to $\frac{1}{3}$, and the detachment was limited to the inferior portion of the retina. Within a year vision had become normal; while, although the ophthalmoscope revealed no improvement in the condition of the other eye, vision had in a certain limited degree returned to it. The other cases are in the main similar to the above. In one, however, that of a woman aged 63, the treatment failed completely. In this case, the detachment had existed for three years, and was total, vision being limited to the perception of light. The author, in discussing these results, considers that a series of seven consecutive cases is sufficient to remove all suspicion of a merely fortunate coincidence. In a previous series of thirty detachments, treated by various methods, he had had but one case of cure. The drug acts as a derivative on the eye, probably by means of its action on the salivary, lachrymal, and other glands. Its action is rapid and prolonged, as, in all the cases in which it was beneficial, improvement took place before the tenth injection, and continued for months. The injections should be administered so as to keep the patient as long as possible under their influence. They should be used daily during ten or fifteen consecutive days, followed by a period of rest of ten days. This method should be persevered in, until it is evident that a stationary condition has been arrived at. The injections should be in sufficient doses to cause a copious salivation of at least an hour's duration. In most of his cases, the author commenced with six drops of a solution of twenty centigrammes of nitrate of pilocarpine to four grammes of distilled water ($= 5$ per cent. solution). The injection should be administered on an empty stomach to avoid vomiting.—*London Medical Record*, April 15, 1881.

Desquamative Syphilis of the Tongue.

M. PARROT has recently drawn attention (*Le Progrès Médical*, No. 11), in a clinical lecture with the above title, to an important and somewhat novel form in which hereditary syphilis sometimes manifests itself.

At the tip of the tongue, or along its edges, a small patch, from one to half a millimetre in diameter, shows itself; it is white, rounded in form, and on the surface of it the epithelium is somewhat thicker and whiter than normal. Very shortly, within twenty-four or twenty-six hours, in the place of this milk-like disk there appears a whitish ring circumscribing a red surface—the centre of the patch—where the epithelium is shed, and the papillæ are visible. From this time the affection spreads with remarkable rapidity, either towards the posterior parts of the tongue or towards its centre. The circles transform themselves into crescents or irregularly curved lines, the concavity of which is almost uniformly forward. This modification in the form of the disease is due sometimes to its attacking the borders of the tongue, where its eccentric course is arrested (for it rarely attacks the under surface), and sometimes to the coalescence of several crescents. In the latter case the surfaces which have most recently desquamated are limited by a kind of festoon. Each patch presents certain characteristics which deserve mention. At the periphery and along it there is to be seen a zone of a dead-white colour, which distinctly demarcates both by its colour and elevation between the portions of the tongue which have and those which have not

been attacked. As regards the desquamated surface, this is found to vary in different parts; close to the epithelial zone, where the disease is most recent, the tongue is smooth and of a vivid red colour; while farther away this condition, though present in some degree, becomes less and less manifest until it shades off into the healthy appearance.

However rapid or active this affection may be, it is very rare for the entire tongue to be desquamated by one of these patches; there nearly always remain, either behind or in the centre, some points which are not affected. Nevertheless, before one patch has completed its course, another one shows itself, and takes the same direction. In this way sometimes no less than three desquamating zones may be observed gradually spreading from the tip to the posterior region of the organ, not unlike the concentric successive undulations which may be seen on the surface of water after repeated shock of any kind.

The duration of the disease, considered in its *ensemble* or in any one of its stages, is very difficult to determine. The latter rarely lasts five or six days. The disease may remain dormant for several months, perhaps years, only to break out afresh during some period of activity, or under influences which up to the present time M. Parrot has not been able to formulate.

The diagnosis is simplified by this consideration—that the disease belongs essentially to childhood, though it is impossible to say that it may not also affect adults. The appearances are so peculiar and so typical, at whatever period observed, that it is impossible to mistake the affection after having once or twice attentively watched it. The scarlet fever tongue, in contradistinction, is despoiled of its epithelium very rapidly and over its whole surface. It is of such an intense red that one might think it would bleed if touched. Thrush also gives rise to desquamation, but very irregularly and not at all after the manner, in zones, just described. Besides, a microscopic examination, however rapidly made, would at once discover the spores and scolices of the parasite. Aphthæ cause not only simple desquamation, but also veritable ulcers sometimes, which, however, rarely extend beyond their first limits.

And as regards other affections of the tongue, such as pityriasis, lichen, psoriasis, or opaline syphilitic *plaques*, on which authors are at present far from agreed, and the signs of which are but badly defined, they may be left out of the question, as they are never found among young children. The pathological anatomy of the disease has yet to be determined. M. Renaut, of Lyons, on examining the scrapings of a tongue affected in this way, found a large quantity of epithelial cells, sporules, coagulated mucin, and embryonic cells in abundance. Such an examination, however, could not of course determine either the seat or the nature of the lesion. M. Martin, chief assistant in M. Parrot's laboratory, has examined microscopic sections of three tongues. From these it was found that the epithelium was tumefied and thickened. The cells of the corneous layer were increased in volume, as well as those of the Malpighian layer, which latter is further in a state of active cell-proliferation. There is also a large number of lymphoid corpuscles in the papillæ and adjacent portions of the derma, either scattered or in groups. M. Parrot thinks from these appearances that the derma is the principal and primitive seat of the affection, and that the superficial manifestations—the only ones visible during life—are secondary and consecutive.

As to the nature of the affection, M. Parrot thinks that it is certainly not parasitic, nor due simply to mal-assimilation, but that it is a manifestation of congenital syphilis: for of thirty-one cases, in no less than twenty-eight were the signs of this disease incontestable. Of these thirty-one cases, not less than twenty-two occurred in children of two years and under, while at from two years to six there were only nine. This is exactly the period when congenital syphilis

is most active. The disease has manifest analogies with skin syphilis, which occurs in patches, with more or less concentric edges, which desquamates, and not infrequently occurs in successive crops, and which microscopically resembles closely the appearances above described in the tongue.

Why, of the whole buccal cavity, should the tongue alone be attacked? M. Parrot thinks because of its richness in nerves and bloodvessels, and of its great activity—conditions which favour diathetic manifestations. He thinks this affection is not contagious by contact, for there is neither erosion nor secretion, and the majority of the subjects attacked have passed the age when the disease is contagious.

The prognosis and treatment do not call for any special remarks, the indications being general rather than special.—*Med. Times and Gazette*, April 23, 1881.

Excision of the Tongue.

Mr. WILLIAM STOKES, of Dublin, at a recent meeting of the Clinical Society of London (*Lancet*, April 30, 1881), read a paper on this subject. He commenced by alluding to the change that surgical opinion has lately undergone in reference to the merits of excision of the tongue, and mentioned the views of Professor Gross and Mr. Collis on this subject. The particulars of six cases in which the writer had excised the tongue were then briefly stated, in which relief from suffering caused by enlargement of the tongue, difficulty of deglutition and articulation, discharge and pain, was obtained in all as an immediate result of the operation. In two of the cases a considerable time—twenty-two months and eighteen months—elapsed without any recurrence of the disease; in two others three months and four months elapsed; in one the patient was lost sight of immediately after the wound healed, and in only one of the cases was almost immediate return of the disease observable. Performing the operation at an early period of the development of the disease, if possible before glandular complications, was strongly advocated, and Sir J. Paget's views stated, as regards the small risk attending the operation.

The question of unilateral or bilateral ablation was then discussed, and the advantages of the latter pointed out. The question of what is the safest and best method of excision was then considered, as well as the two special dangers of the operation, hemorrhage and septic complications. The author observed that removal of the tongue by a cutting operation is not only more liable to be followed by hemorrhage, but also by septic infection, the outcome of which latter is in a large number of cases either pulmonary gangrene or septic pneumonia. These are not observable at all to the same extent in the cases operated on by the *écraseur*. In proof of this, the statistics of Dr. Scheffer and Mr. Collis were considered, in the former of which it was found that the percentage of mortality from septic causes in the cases operated on by incision reached the startling figures of 60, and in those of Mr. Collis 61. Mr. Barker's cases were also alluded to, but the number of cases (3) operated on by incision, in which there were no septic consequences, was not considered sufficiently large to materially affect the conclusions arrived at.

The disadvantages of certain of the *écraseur* operations were then pointed out, and the author concluded by describing the method of operating he preferred. He commences by transfixing the cheek at a point corresponding to the last molar of the lower jaw, and makes an incision downwards and forwards towards the angle of the mouth, terminating a few lines above it. All bleeding vessels being secured, and the parts retracted, a ligature is passed through the tip of the tongue to facilitate the drawing forwards of the organ by an assistant. This being

done, a straight Liston's needle, armed with a double strand of carbolized silk, is passed through the base of the tongue at a point behind the foramen cæcum. In front of this the chain of an *écraseur* is passed round the tongue, and the organ gradually severed. This portion of the operation is done very slowly, taking from thirty-five to forty-five minutes. The author never witnessed in any of his cases any secondary hemorrhage, immediate or remote. The wound in the cheek is then brought together by a few points of interrupted suture. The free ends of the strand of silk passed through the base of the tongue are then fastened temporarily, by adhesive plaster, to the side of the cheek or forehead. This double thread, which, in the event of secondary hemorrhage or traction, would be of much assistance in enabling the surgeon to draw forwards the base of the tongue and secure the bleeding vessels, is removed usually on the third or fourth day after the operation. The author believed that, by the use of the *écraseur* employed in the manner he described, coupled with antiseptic measures during the healing of the wound, the operation is attended with little pain, with the minimum of risk as regards either primary or secondary hemorrhage, or those septic troubles which, after all cutting operations, are so fruitful a means of raising the mortality attending this important operation.

Mr. HEATH said that in this country the tongue was more freely operated upon than was assumed by the author. As to the question of growth after removal, in Mr. Barwell's case there was a considerable increase; and in his own case, where more than half was removed, the stump of the tongue nine years after appeared to have enlarged. The mode of operating was different in different cases. He had now entirely given up the galvanic *écraseur*, in favour of the chain *écraseur*, and had never found occasion either to pierce or incise the cheek; for, by bending the *écraseur* and pulling forwards the tongue, the instrument could be applied far back. Whether a unilateral or bilateral operation should be performed depended on the merits of the case; and he agreed with Mr. Baker that a unilateral operation should be done when necessary; it also enabled the surgeon to examine the two halves of the organ when split in the median line.

Mr. MORRANT BAKER advocated the unilateral method when the disease was sufficiently limited. The median incision avoided the severance of arteries and rendered the detachment of the organ more easy, and it allowed of removal of the other half if the disease were found to encroach near the median line. He thought division of the cheek might be more often done with advantage, especially when the disease extended far back. It allowed also of a better control of hemorrhage. He thought the tongue could not grow after incision, but that an apparent increase in size might result from the contraction of the cicatrix. And as to the retention of speech, it must be remembered that the tongue was not wholly removed when only the portion in front of the foramen cæcum was excised. When completely removed, the mouth has a very different appearance; there is a large hollow in the place of the root of the tongue, and the arches of the palate are approximated. Mr. Gant had recently exhibited a case of nearly entire removal, which had been effected much on the plan adopted by Collis. That patient could hardly articulate. Mr. Baker had not himself found tracheotomy necessary; but in a case where he assisted, tracheotomy had to be done on account of blood flowing into the trachea. A fresh hemorrhage occurred just before the removal of the tongue was completed, and the blood flowed more readily into the trachea than when there was no tube in it. Of course it might be said that the pharynx should have been plugged.

Mr. MACCORMAC pointed out that the trachea itself might have been plugged. He asked Mr. Stokes what measures had been taken to remove the diseased glands, which occurred in some of his cases. Permanent success depended upon

this. Any modification of the operation, by splitting the cheek, etc., was justifiable if it facilitated the removal of the diseased tissues in the floor of the mouth. The difficulty of removal of infiltrated glands was considerable, and he should like to know whether the plan followed by Mr. Stokes enabled him to effect their removal. He was surprised to learn that an operation producing a crushed and bruised surface (as did the *écraseur*) is followed by less risk of septic processes than a simple cut wound. However, the fact remained. He had once or twice divided the tongue without any hemorrhage of moment occurring.

Mr. BARKER said that the list he had furnished to Mr. Stokes somewhat altered the relative rate of mortality after different methods of operation. At University College Hospital, from 1871 to 1879 inclusive, there had been 51 cases of lingual epithelioma, in 34 of which excision was performed. 11 of these cases died in consequence of the operation; 5 from septic pneumonia, 2 from septic bronchitis, 2 from septicæmia, 1 from pyæmia, and 1 from œdema of the glottis. A large proportion thus died from septic causes. Of these cases 25 were operated on by the galvanic *écraseur*, with 9 deaths; 7 by the wire *écraseur*, and 1 death (from pyæmia); 3 by the knife, no deaths; and 1 by ligature, fatal (from septicæmia). These figures, although few, condemned the galvanic *écraseur*. Did Mr. Stokes include the galvanic *écraseur* in his statistics? Mr. Barker agreed with Mr. MacCormac as to the preference to be given to the knife. The tongue should be split in the median line, and the base cut across, this measure allowing of the ready control of bleeding vessels and of their ligature in the ordinary way, and was far less open to danger of septic trouble than after crushing. Tracheotomy was sometimes called for in cases where much hemorrhage was to be anticipated, or the diseased tissues were of wide extent. The risk from hemorrhage could then be met by plugging the trachea, or by means of a sponge in the pharynx. In three cases he had no trouble in retaining a sponge there; but if the trachea were to be plugged, Trendelenberg's tampon should be used, care being taken in its inflation, since, as Dr. Semon had shown, its over-inflation caused dyspnoea.

Dr. DOUGLAS POWELL asked Mr. Barker what was meant by "septic" bronchitis and "septic" pneumonia. Did he imply that in such cases there was general septic infection; and were other organs affected, as in such septicæmia? If there were only bronchitis or pneumonia, that might possibly be produced by the passage of irritant matter into the bronchi or lung, and would be met by measures preventing such gravitation.

Mr. T. SMITH asked whether Mr. Stokes made any incision in the sublingual tissues. He believed that only a portion of the tongue could be pulled forward, and that the organ could not be wholly removed unless the subjacent tissues were divided. As he understood it, the septic pneumonia of these cases is produced by blood, etc. trickling down the air-passages. The discharges were more copious after the use of the galvanic *écraseur*, owing to the slough it produces.

Mr. MARSH, in two or three instances of unilateral excision, had been disappointed with the result, the longitudinal cicatrix holding the tongue down, and the muscles of the remaining half turning it over, a condition giving rise to discomfort. It was plain that opinion was adverse to the galvanic cautery. He was acquainted with cases of secondary hemorrhage following its use, and with one or two of fatal complications. By first dividing the muscles attaching the tongue to the lower jaw the base of the epiglottis can be reached. The experience of St. Bartholomew's Hospital did not accord with the statistics given by Mr. Barker.

Dr. COUPLAND urged Mr. Barker to reply to Dr. Powell's question. In post-mortem examination of cases of cancer of the tongue, foci of broncho-pneumonia

were common, and to be attributed, not to septic infection in the ordinary sense, but to the inhalation of irritant and putrid materials.

Mr. BARKER said the question was an important one. No doubt sometimes there were pulmonary abscesses of truly pyæmic (embolic) kind; but the lungs might be also affected by blood trickling down the trachea during the operation, or fetid discharges similarly passing; also, he believed, by the simple inhalation of very acrid emanations from these wounds. In one instance the house-surgeon and nurse in attendance on the case became affected with sore throat. He did not think these different modes of lung complication should be confused.

Dr. POWELL said the point was one of great practical importance. He had asked if there was any evidence of general blood-poisoning to which the lung disease was secondary. If in all such cases the infection was local, then a remedy might be sought in antiseptic inhalations and in enforcing a prone position, so that the blood and discharges might not pass down the air-passages.

Mr. BARKER said that in one case there was distinctly a general pyæmia, developing long after the operation, with abscesses in the liver and in the vicinity of the kidney, as well as the lung. In the other cases there was no involvement of other organs.

Mr. STOKES in reply said, that he had not included Mr. Barker's statistics in his lists, but he had made a percentage mortality of about sixty in the cases of simple excision by the knife; and he admitted that it was remarkable that there should be apparently less danger from septicæmia in such cases than in those treated by the cautery. He was glad to find Mr. Marsh preferring the bilateral method, and could indorse what he had said as to the greater inconvenience both as regards deglutition and articulation resulting from one-half of the organ being excised than when both sides are removed. He knew of one case where the patient came to have the other half removed because of the difficulty in articulation and because it kept getting between his teeth. He was also pleased to hear Mr. Barker suggesting a preliminary division of the cheek, which greatly facilitates the operation. He had performed division of the sublingual tissues in such cases where the thickening and enlargement of the tongue called for it.

Extirpation of the Larynx for Malignant Disease.

Dr. WHIPHAM and Mr. PICK communicated to the Clinical Society of London (*Lancet*, April 2, 1881), a case of extirpation of the larynx for a growth originally affecting the left ventricular band and vocal cord, which subsequently involved the whole larynx.

The patient, a commercial traveller, aged thirty-nine, consulted Dr. Whigham on May 27, 1876, on account of huskiness and a constant desire to "clear the throat," which had come on suddenly and without apparent cause. He had been previously free from all throat affection, and there was no history of syphilis. The man was very nervous, and it was not till June 8 that a view of the larynx was obtained. It was then found that a warty-looking growth rather larger than a pea arose from the anterior part of the left ventricular band and vocal cord. After repeated examination and the passage of brushes into the larynx, with a view of preparing the patient for operation, his nervousness was so far under control on July 29 that two small portions were removed by evulsion, with great relief to the huskiness. The case was constantly under observation, but no further operative interference was required until March 3, 1877, when three pieces of the tumour (which microscopically presented for the most part the appearance of papilloma, but in which at one or two spots there appeared to be a tendency to the production of epithelial cells) were removed by the forceps. The whole of

the warty portion was removed at this time, but the vocal cord was thickened generally; the voice recovered tone to a great extent. Subsequently, however, it was found necessary to apply the forceps to a recurrence of the growth on several occasions—viz., June 16, 1877; January 5, 1878; March 23, 1878; April 19, 1878; December 31, 1878.

Early in 1879 the patient had a severe attack of catarrhal laryngitis, and on June 23 in that year he complained of having lately suffered from great dyspnoea, with tenderness over the thyroid cartilage and some external swelling in this situation. He was admitted into St. George's, and in the course of the following six weeks several pieces of the tumour were removed. Again in October, 1879, a large piece was taken from the larynx. By March, 1880, a great change had occurred in the state of the parts; the growth involved the whole ventricular band and vocal cord; the left ala of the thyroid cartilage was pushed outwards, and was tender; dyspnoea being at times urgent. Towards the end of April, the dyspnoea threatened suffocation, and Mr. Pick, after examining the patient, performed tracheotomy, from which the recovery was perfect. During the next six months the disease progressed rapidly, the whole larynx being involved by the middle of October, when a large lobulated mass was felt in the position of the left ala of the thyroid cartilage. In the early part of November, 1880, some hemorrhage occurred through the tube, and at the end of the year he was readmitted into hospital with a view to the performance of some operation. Shortly after his readmission this hemorrhage recurred rather freely.

After consultation with his colleagues on the previous day, Mr. Pick proceeded to extirpate the larynx. Having introduced a tampon canula, Mr. Pick made an incision on January 16, 1881, two and a half inches in length in the median line of the neck, and a second incision at right angles to it across the middle of the thyroid cartilage. On reflecting the skin the growth was found to involve the left ala of the cartilage. The thyroid cartilage was then divided vertically in the median line, and the two halves separated, when the whole larynx was found occluded by the growth. The left ala was removed, and subsequently the right also. The cricoid, with the remains of the arytenoids, were then freed from their attachments, and removed, and finally the epiglottis, which was involved in the disease, was cut away. The wound was carefully explored, and all traces of the growth as far as possible were removed. No vessel required ligature. The operation occupied three-quarters of an hour, and the patient was not much exhausted at its close. The wound was plugged with sponges. Slight hemorrhage occurred after the operation, which was arrested by the introduction of an additional sponge. Nutrient enemata were ordered every four hours, and for the first two days the patient's progress was satisfactory. On the third day, however, his temperature rose to 103.2° F., and his skin became dry; his pulse ran up to 142. On the fourth day he complained of severe pain about the ensiform cartilage; his expression became anxious. Rapid exhaustion set in, and he died on the morning of the fifth day after the operation. At the autopsy, right pleurisy and pericarditis, presumably pyæmic, were the chief lesions found.

Among the many points of interest in the case, the following were brought before the notice of the Society: 1st. That for three years the microscopic appearances of the growth were for the most part those of papilloma. 2d. That the duration of the disease (four years) was rather in favour of its having been an innocent growth in the earlier stages, although microscopic examination showed that, even at the onset, there was, in one or two places, a tendency to epithelial proliferation. 3d. That the above facts, and the limitation of the growth to the larynx, were favourable to the success of the operation of extirpation. 4th. That if the operation had been undertaken as soon as the malignant aspect of the dis-

ease became manifest, success might have been the result. 5th. That the plan of dividing the thyroid cartilage and removing each half separately is preferable to the method adopted by Dr. Foulis of removing the larynx entire, and for these reasons: (1) that by separation of the alæ a good view of the extent of the disease is obtained at an early period of the operation; and (2) there appears to be less danger of wounding important structures.

Dr. SEMON was gratified that Mr. Pick had found his modification of Trendelenberg's tampon canula useful; and he drew attention to the liability to dyspnoea being caused by over-inflation of the tampon. This occurred in a case of thyrotomy he had recorded, and was attributed by him to pressure upon the tracheal branches of the vagus nerve. Similar attacks occurred in two cases by Dr. Bosworth, and also in one by an Italian surgeon, and another by an English surgeon. The dyspnoea at once ceased on allowing some of the air to escape from the tampon. In Mr. Pick's case there could be no doubt that the disease was epitheliomatous at the time of operation. Extirpation of the larynx was not necessary for papillomata, which could be removed by endo-laryngeal operation or by thyrotomy. He believed that for a simple growth to become malignant there must be a constitutional tendency to malignant degeneration, which would manifest itself whether the growth had been interfered with or not. To show what may be done by persistent endo-laryngeal operation, obviating recourse to the formidable operation of extirpation, he quoted a case recently published in the *Berlin. Klin. Wochenschrift*. It was a child eleven years old, in whom a papillomatous growth had been removed by thyrotomy, sub-thyroid laryngotomy, and thyrotomy again, with invariable recurrence; extirpation of the larynx was advised, but declined; and for six months Dr. Bucher persistently treated it by endo-laryngeal methods, so that he succeeded in completely removing the growth. Fifteen months later the child was free from the growth. In fact, papillomatous disease does not give any indication for extirpation of the larynx.

Mr. Pick agreed that extirpation was not called for so long as the growth could be removed by the forceps. In this case it would have been better to remove the alæ of the thyroid when the tracheotomy was done, for the growth had already perforated the cartilage.

First Endolaryngeal Operation during Anæsthesia.

By this operation, the successful removal of a papilloma laryngis from the larynx of a boy eight years old, under the influence of ether, Prof. SCHNITZLER has shown for the first time that an anæsthetic may in certain circumstances be used during endolaryngeal operations. Prof. Schnitzler describes (*Wiener Med. Presse*, 1880, Nos. 48, 49) the operation as follows: "An assistant seated opposite me took the boy on his knees and held him fast. Ether was then administered. So soon as the boy was narcotized, an assistant opened the mouth with a suitable dilator, drew forward the tongue with a forceps, and, taking hold of it with his left hand, held it so that I could not only pass the laryngoscopic mirror conveniently into the throat, but could also direct into the cavity of the mouth by means of a reflector on my forehead, the light of a gas flame situated on the patient's right. Holding the mirror with the left hand, I introduced the laryngeal polypus forceps with my right, and, notwithstanding the secretion collecting in the throat, I succeeded in rapidly seizing and extirpating the new growth." A slight recurrence was readily removed by the application of caustic. —*London Med. Record*, April 15, 1881.

Extirpation of the Thyroid Gland.

Dr. RICHELOT (*Annales des Malad. de l'Oreille, du Larynx, etc.*, Dec. 1880) reports a case in which he removed this gland for "colloid goitre," associated with dyspnoea, in a woman aged 25. The first commencement of the tumour was at the age of 11 years, with great increase between the ages of 15 and 17. Six years before admission, M. Gosselin employed puncture, with the application of caustics and drainage. The tumour on examination was of the size of half a fist, the central lobe being especially large, hard, and non-fluctuating. There was habitual dyspnoea, with dysphagia and weakness of voice. Whilst the patient was in the hospital there was an attack of subacute thyroiditis, after cessation of which the operation was undertaken. The gland was removed through a curved incision with its convexity downwards, extending to the common carotid on each side, and passing immediately above the sternal notch in the median line. The trachea was found strongly curved to the right and slightly flattened from before backwards, but not softened or degenerated. It was intimately adherent to the gland, from which it was removed from below upwards. There was very little loss of blood during the operation. Silk ligatures, which were first employed, were mostly replaced by catgut ones, and the wound was united by wire sutures. There was severe dysphagia for several days, followed at the end of a week by an attack of bronchitis and tracheitis. The result was complete cicatrization of the wound in the fifth week, accompanied by complete and persistent aphonia.—*London Medical Record*, April 15, 1881.

Statistics of Mammary Cancer.

Not long ago we drew attention to some of the clinical aspects of cancer of the female breast, and especially as to its causes. We now propose to speak of it as seen in the post-mortem room, and of the metastatic deposits (verified after death) which occur in different organs, and which give to this disease one of its most terrible characteristics. Drs. TÖRÖK and WITTESHÖFER have recently analyzed the statistics of the Viennese Pathological Institute from 1817 to 1879, including the post-mortem reports of no less than 72,000 bodies. The results of this exceedingly interesting study are given in *Langenbeck's Archiv für Klinische Chirurgie*, vol. xxv., page 873 *et seq.*, and from it we extract the following as relating to mammary cancer. Of the 72,000 bodies of both sexes, 366 were reported to have died with cancer of the breast, i. e., about $\frac{1}{2}$ per cent.; of these, in eight cases only was there any doubt as to the diagnosis. Of course the figures can only have a relative value, for it is quite probable that breast-cancer is a more frequent cause of death than appears, seeing that cases not adapted for operations would not be admitted, while many might be discharged after admission, as incurable cases. In 351 cases the affected side is given—161 cases right, 144 left, and 46 on both sides. Several authors seem to have noticed this fact, and associate it with the more frequent occurrence on the right side of diseases predisposing to cancer, such as puerperal mastitis. Of these cases (366) only three were males. As to the age at which death occurred, the results correspond very nearly with the clinical deductions of Dr. A. Winiwater. Between twenty-five to forty-five years, 29 per cent.; forty-six to fifty-five years, 34 per cent.; over fifty years, 37 per cent. From these percentages the authors framed the following rule for practice: The less the age seemed to render an operation advisable, either in consequence of special circumstances, or because of the shock of the operation, the greater the number of cancer deaths at that age. In estimating the value of an operation, attention was given to the occurrence of metastases (i. e., of metastatic deposits) in those who had undergone operation and in those who were not ope-

rated on; for the operation can be considered advantageous then only, when it makes a radical cure of the disease possible. The following figures show how this stands:—

Operated . . .	184	{ With metastatic deposits . . .	79	—
		{ Without " " . . .	—	105
Not operated . . .	182	{ With metastatic deposits . . .	141	—
		{ Without " " . . .	—	41
	<hr/>		<hr/>	<hr/>
	366		220	146
			<hr/>	
			366	

It follows, therefore, that operation in 146 cases would have allowed of complete removal of the carcinoma. A further proof of the great value of early operation is afforded; for otherwise there is always a chance that metastases may have occurred.

Coming to the subject of the secondary growths, reference is just made in support of the common belief that in the generalization of cancer, before the outbreak actually takes place, a local proliferation in the immediate neighbourhood of the primary growth frequently occurs, either as a direct outgrowth, or in the form of new deposits. To this local dissemination is shortly added induration of the nearest lymph-glands, through which the cancer-cells first get into the lymph-stream, and thence into the various internal organs through the blood-current. Thus, in considering secondary deposits of cancer, it will be well to divide the subject into three stages—local infection, lymph-gland infection, and infection of internal organs. Local infection is where the cancer spreads by direct continuity. Among the 366 cases, there were 192 of local infection. Of these the skin of thorax 148 times, skin of abdomen 5, pectoral muscles 58, intercostals 22, ribs 29, sternum 20, clavicle 3, anterior mediastinum 4, pleura 25, pericardium 2, peritoneum 2, liver 2. Thus it will be seen that the skin and subcutaneous tissue were affected in about three-quarters of the whole cases; while the pectoral muscles were much less frequently so. Thus the ribs and the pleura, and in about an equal number of cases, which must be regarded quite as exceptional and accidental, the pericardium and peritoneum. Of the 148 cases above given, in which the skin was affected, there was ulceration in 110 cases, and in 38 there were disseminated nodules near the original growth. If the entire number of cases (192) of local dissemination be considered in its relation to axillary glandular affection, and metastases in internal organs, a very similar percentage is found both in those with ulceration and those in which there was no ulceration: thus there were about 73 per cent. of cases of internal metastases in each group; while the axillary glandular affection was present in 44 per cent. of the cases with ulceration, and in 59 per cent. of the group without ulceration. If the two groups, however, taken together, be compared with the cases in which there were no secondary local growths, then in only 45 per cent. of the cases were internal metastases present, and only 42.5 per cent. of axillary glandular implication. Thus it would seem that internal metastases are much more frequent in cases where local recurrence takes place, than in cases in which there is no such recurrence. And thus one is led to believe that the cells of a rapidly growing cancer more easily find their way into the blood and lymph currents, and so into internal organs, where they set up metastatic growths, than would the cells of a more purely local, and probably slower-growing, growth.

As regards the affection of the lymph-glands, it has generally been taught that this is the first stage of a general infection; for, in accordance with our present views, the generalization of cancer takes place through the lymphatics; hence the

absence of glandular affection—other things being equal—is always thought to be a favourable omen. In this particular, however, the results of the present inquiry do not agree, for they show that in the 366 cases, axillary glandular affection was present in only 175 cases, with internal metastases in 57.7 per cent., while in the remaining 191 cases without axillary affection there were 62.3 per cent. of internal metastases. Of course, it is possible that these figures are not accurate; for the glandular swelling may have been overlooked, or it may accidentally have escaped being recorded. The affection of other glands—cervical and supraclavicular,—as is well known, is very much below that of the axillary glands; thus, in the cases now under consideration, it is only recorded in 6.3 per cent. of the total. The relative frequency with which internal organs are secondarily affected has been variously given; but a consideration of the cases before us, when tabulated, points with great force to the lymphatic, respiratory, and digestive tracts as the “seats of election.” All organs which are rich in blood and in lymphatics—such as the lungs and liver—are specially predisposed to metastatic disease. The bones, genital organs, and central nervous system are less liable to be infected with secondary deposits. The urinary apparatus is still less often infected; while the skin and muscular system are much more generally affected by direct continuity of growth. The organs of sense sometimes suffer; but these cases are extremely rare.

We have only been able to give a brief *résumé* of this interesting paper, to the original of which we would refer the reader who wishes for further details. On the whole, the result of this post-mortem research tends to confirm the conclusions which have gradually been arrived at from the many clinical studies on the subject that have been made; and on this if on no other ground it is extremely interesting.—*Med. Times and Gazette*, March 26, 1881.

Final Results of Operations for the Radical Cure of Hernia.

BRAUN communicates (*Berl. Klin. Woch.* Nos. 4, 5) the results of nineteen such operations performed by Professor Czerny on sixteen patients. The indications for radical operations were: 1, strangulation; 2, impossibility of keeping up the hernia with a truss; 3, adhesion of the hernia, preventing its return; and, 4, fecal fistula in the hernial sac. One case died from pyæmia; another from convulsions independent of the operation. Ligature of the neck of the sac and suture of the hernial aperture was done in nine inguinal herniæ, and in two omental herniæ in the linea alba. Six inguinal herniæ in adults recurred, but remained small and could be kept up with a truss. One child had remained cured for three years. Partial constriction of the sac with suture of the hernial aperture was done in two children, and in both cases the hernia returned. The hernial aperture alone was closed in two adults and two children. In both adults the hernia recurred, and also another inguinal hernia appeared on the other side. The children remained cured nineteen and thirty-four months. The neck of the sac alone was ligatured in an adult, and a small local recurrence took place.—*London Med. Record*, May 15, 1881.

Treatment of Aneurism by the Elastic Bandage.

At a late meeting of the Surgical Society of Dublin, Mr. WHEELER communicated two cases of popliteal aneurism cured by the elastic bandage. The first case was that of a man aged thirty-seven years; the tumour being as large as a small orange. In that case the blood was “locked” in the aneurismal sac, the limb being bandaged from the foot up to the inferior margin of the aneurism; and a second bandage was applied, commencing at the superior margin of the

tumour. The compression which was made with the elastic bandage was borne for sixty-five minutes; a tourniquet was then applied over the femoral artery, and the bandage gradually loosened. Pulsation returned in the sac, but not so forcibly as before, and the tumour felt more solid. In the evening, the bandage was reapplied in a similar manner, and in a little more than half an hour the compressing band was removed with the same precautions. The pulsation had then ceased; but compression, by means of a tourniquet, was exerted over the femoral artery for some hours after, to moderate the flow of blood. The second case was that of a young gentleman aged twenty-three years. The tumour was in the right popliteal space, and seemed about the size of a walnut. The only history as to its causation was over-exertion when playing cricket. He was of a nervous and excitable temperament. A somewhat similar mode of treatment was adopted in that case. The limb was elevated for a few minutes before applying the bandage, which was done continuously from the foot upwards, but very lightly over the aneurism. On removal of the bandage in forty-five minutes, all pulsation had ceased. The tumour was solid, and in five weeks after had almost completely absorbed.

Mr. TUFNELL said that he had had an opportunity of examining the first case mentioned by Mr. Wheeler, and that the result was most satisfactory. A question arose as to whether it would be safe to adopt that line of treatment in the country, where the surgeon might not have the patient under his immediate observation.

In reply, Mr. WHEELER said that he had been particular to state that, in both cases, he had applied compression to the femoral artery before removing the elastic band, which was, moreover, done very gradually. Lest the sudden return of the blood might damage the recently formed coagulum in the sac, he was of opinion that it would be advisable to compress the main artery, either by digital or instrumental means, before applying the bandage, for the cure of aneurism in persons advanced in years, in order that the collateral circulation might be somewhat established.—*British Medical Journal*, April 16, 1881.

Iodoform as a Dressing in Tuberculosis of the Bones and Joints.

Dr. MIKULICZ (Vienna) at the recent Congress of German Surgeons read a paper on this subject. Mosetig had published a report of twenty cases, in which, no antiseptic precautions being used, wounds were treated by simply sprinkling iodoform on them, whereby their course was rendered quite aseptic, and the so-called local tuberculosis was healed. In consequence of this, the remedy had been used in Billroth's clinic since the beginning of the year, with a similar striking result. Wounds made in the extirpation of tumours, when sprinkled with iodoform, and covered with a dressing of cotton-wool, healed without secretion, just as wounds heal by granulation under a scab; ichorous sores, under the influence of this remedy, soon lost their putrid smell, and rapidly became clean; tubercular processes also, in the skin, as well as in the joints and bones, were definitely healed by this treatment. The remedy is especially to be recommended in wounds connected with cavities, which come into contact with readily decomposed fluids; as after extirpation of tumours of the pharynx and tongue. In cases of suspected tubercular disease of joints, the injection of an ethereal solution of iodoform appears to be sufficient. If, however, fistulae be present, the primary focus must be exposed, scooped out, and filled with iodoform; and the fistulae themselves must be treated with iodoform and gelatine bougies. For injection, an emulsion of iodoform with mucilage of acacia and water is recommended, or a solution of 1 part in 10 of ether, or

of 1 in 5 of ether and 5 of oil. Iodoform does not excite any influence at a distance; so that, while very severe local disorders may be healed, death may occur from tubercle of internal organs. Hence the constant contact of iodoform with the diseased granulating surfaces appears to be necessary. Lupous ulcers heal rapidly under iodoform, without previous scraping. According to the researches of Mikulicz, the antiseptic action of iodoform is small but constant; this explains the necessity of its constant contact with the granulating surface. Iodoform does not prevent the formation of micro-occi in blood and serum, nor of bacteria in Pasteur's fluid. Its active principle is iodine, which in the tissues is transformed into iodides of potassium and sodium. Toxic symptoms occur only in cases of large wounds, and are of short duration. Dr. Gussenbauer could confirm the excellent action of iodoform, which he placed before all other known antiseptics as a means of producing healthy granulations. In nineteen cases of tuberculous affections, he had hitherto met with seven rapid recoveries. In a case of extensive tuberculous osteitis of the tarsus, he had poured a large quantity of iodoform into a cavity in the os calcis, with the result of producing a high aseptic fever, which soon passed off. The case was still under treatment. A similar affection of the carpus was healed, with retention of free action in the joint.—*London Med. Record*, May 15, 1881.

Resections of Joints and Antiseptic Dressings.

In a recently published memoir (*Revue Mensuelle de Méd. et de Chir.*, No. 12, 1880) M. OLLIER points out in the first place that the value of the antiseptic method in resections of joints varies according to the nature of the indications for the operation. The category of what are called orthopædic resections, the sole object of which operations is the restoration of the form and function of an ankylosed joint, has profited the most from antiseptic practice. In recent times, and since the introduction of the antiseptic method, the indications for operation on deformed joints and distorted bones have multiplied to such an extent that this chapter of surgery, M. Ollier states, requires now to be wholly rewritten. With regard to the utility of antiseptic dressings, on the other hand, in cases of traumatic and pathological resections, it is necessary, in order to appreciate this, to distinguish whether such operations are performed for suppurative or for non-suppurative lesions. In the class of non-suppurative lesions, comprising recent articular fractures, plastic osteo-arthritis of rheumatic or traumatic origin, and neoplastic affections, the antiseptic method can be applied with almost as much advantage as in the category of orthopædic resections. In cases, however, of chronic inflammatory lesion with suppuration, the presence of numerous fistulae, and the formation of fungoid tissue within the joint and along the fistulous tracks, the case is different, and the surgeon cannot obtain complete immediate reunion after resection, and has, during the after-treatment, to deal always with more or less abundant suppuration. Still, in such cases, this suppuration is considerably diminished by carbolic dressings, and in all kinds of traumatic and pathological resections, antiseptic methods, according to M. Ollier, are imperiously demanded.

The antiseptic method, whilst it has extended the range of operative surgery in one region of articular and osseous lesions, has contracted its application in another. As this method prevents suppuration after an orthopædic or a primary traumatic resection, so also will it act after an accidental wound into a joint with fracture of the articular extremities of the long bones, and thus prevent the complication which alone indicates resection in many of such cases. In many traumatic lesions of this kind, antiseptic cleansing of the wound, and the removal of detached splinters will, it is stated, suffice for the preservation of the limb; and

in others, a more or less extensive removal of fragments will replace a true resection. Thus the antiseptic treatment has reduced very much the number of primary traumatic resections, and especially those resections called by M. Ollier preventive, because they have been practised with the view of preventing the dangers to which formerly the subject of a contused wound of a large joint was always exposed.

During six months of the last year, M. Ollier, applying exclusively Lister's method of antiseptic dressing, performed seventeen resections of large joints, one resection of a pseudarthrosis, and two operations for osteotomy. In all these cases, the patients, so far as concerned the immediate result of the operative treatment, recovered without the occurrence of any infectious complications. M. Ollier, deprecating any desire to exaggerate the merits of Lister's antiseptic method, states that, in comparing this series of cases with those previously observed by him, he is compelled to recognize the fact that in the Hôtel-Dieu of Lyons he has never had a series so invariably satisfactory, with regard both to the simplicity of the processes of cicatrization and to the final result. Through comparison of a series of cases of any operation treated with Lister's dressing with analogous series of cases treated by other antiseptic methods, M. Ollier has been led to give the preference to the former. During the last four years he has performed resection of the elbow in thirty-two cases, in all of which the patients recovered. In nine only of these cases was Lister's dressing applied. In some the wound was uncovered; in some it was treated according to a plan of so-called immovable antiseptic occlusion, and in others by an imperfect dressing of carbolic acid. But though these different methods had all the same result with regard to the preservation of life, they varied with regard to complications. Whilst in the nine cases treated strictly according to Lister's method, no serious complication was observed, in many of the other cases the cicatrizing process was interrupted. In five of these last cases erysipelas occurred, and in two local gangrene. From his own experience of Lister's dressing in cases of resection, M. Ollier has made out that this prevents inflammation of wounds without arresting the physiological processes of repair. The cicatrization and repair of osseous structure progress equally with the reunion of skin, and are not affected by the antiseptic treatment. Indeed, the organization of bone, and the ossification of the periosteal sheath, are rather accelerated than retarded by this plan of dressing, since this protects the wound and the internal layer of granulation-tissue from danger of infection. In every case of resection treated according to Lister's method, whether the operation be practised for deformity, injury, or chronic disease, M. Ollier endeavours to establish free drainage by a multiplicity of tubes, and refrains from applying sutures along the whole extent of the wound. In cases of chronic joint-disease, where the synovial membrane is much thickened and vascular throughout, the superficial portion is excised or scraped away, and the deeper portions destroyed by the actual cautery or some chemical agent (chloride of zinc, nitrate of silver, perchloride of iron). Thorough ablation of this thickened granular layer is not practised by M. Ollier in every case. Though it may be right to attack with the curette all tuberculous fungosities, and whatever tissue resembles such structures, it should not be forgotten that the exuberant, fungous growths about fistulous tracts either waste or become further organized, after, through the extraction of a sequestrum or some other dead material, the source of the suppuration has been removed. The thick granular layer of a diseased joint, when the result of simple inflammation, is useful, M. Ollier thinks, after it has been altered, in the repair of the bones and the articular structures, and, therefore, ought not to be wholly removed. A portion only should be cut or scraped away, or the surface should be touched by the actual cautery, which is regarded as an excellent agent for con-

verting a fungous into a plastic process. The subsequent suppuration on this part of the wound will, it is stated, be of no consequence so long as the superficial structures and the edges of the wound do not become inflamed, and so long as fever and symptoms of septic absorption are absent. Lister's antiseptic method is of great value, M. Ollier holds, when applied in cases of subperitoneal resection. By preventing inflammation, this method guards against destruction of the osteogenetic elements attached to the inner surface of the periosteum, and arrests any diffuse suppuration which, besides the accidents common to all resections, would prove a positive obstacle to the accomplishment of the processes of repair. In almost all cases of resection, Lister's method is valuable, not only in guarding the patient against dangerous septic affections, but also, as it accelerates the healing of wounds, in its enabling the surgeon to arrest, after the operation, those changes in muscular and nervous tissue which are the result of prolonged suppuration, associated with prolonged immobility of the limb. The application of Lister's method, in cases of severe open wound of a bone or joint, should, in M. Ollier's opinion, lead to a difference in the treatment of such injuries. In case of a wounded joint with fracture, instead of resorting to a resection, that is to say, to an operation consisting in the removal of all free fragments, and in bringing together the ends of the remaining portions of the injured bones, the surgeon might rest content in freeing the wound of foreign bodies and loose fragments of bone, leaving in place the fragments that are still covered by periosteum, and even such as have been partially denuded. It is not the injury itself, M. Ollier points out, that causes the death of such fragments, but the inflammation and suppuration following such injury. Such fragments, as is well known, in cases of simple fracture usually unite with the rest of the injured bone.

A case of partial resection of the tibio-tarsal joint is reported, to show the good results of Listerism in operations for the partial removal only of one or both opposed surfaces of bone forming an articulation.

In conclusion, M. Ollier protests against an unnecessary and too widely extended application of operative surgery with antiseptic precautions to deformities of the skeleton and its articulations, which have hitherto been regarded as amenable to ordinary orthopædic treatment.—*Lond. Med. Record*, April 15, 1881.

Midwifery and Gynæcology.

A Case of Extra-Uterine associated with Intra-Uterine Fætation, in which Abdominal Section was performed.

DR. GALABIN related, at a recent meeting of the Obstetrical Society of London (*Med. Times and Gazette*, May 28, 1881), a case of extra-uterine associated with intra-uterine fætation, in which abdominal section was performed. The patient, who was thirty-six years old, was married in the spring of 1878. In the summer of that year she had an abortion, and in April, 1879, was delivered, with the assistance of forceps, of a full-term child. She expected her second confinement in September, 1880, and engaged Mr. Thomas Duke, of Rugby, to attend her. During the fourth and fifth months of pregnancy she had considerable pain and tenderness in the right side of the abdomen. Two tumours were then discovered. That on the left side gave the usual evidences of fœtal life, and was clearly the pregnant uterus. Over the tumour on the right side nothing could be heard by auscultation; and Mr. Duke, as well as several other medical men who examined the patient, concluded that the case was probably one of an ovarian tumour com-

plicating pregnancy. On June 16, symptoms of rupture suddenly occurred, followed by those of peritonitis, and the outline of the right-hand tumour was found to have disappeared. The patient's state having become very critical, the author was sent for, and reached Rugby on the evening of the 19th. He was inclined, from the history, to agree with the diagnosis of ruptured ovarian cyst, but the possibility of combined extra- and intra-uterine foetation existing was entertained. He suggested an exploratory operation as the only chance for life, and performed this on the morning of the 20th. A large quantity of blood and clot was found in the peritoneal cavity, and an extra-uterine foetus contained only in its thin membranes. The placenta, attached to the back of the pregnant uterus and the posterior surface of the right broad ligament, was left *in situ*, and a drainage-tube placed in the wound, entering the general peritoneal cavity. The operation was performed under carbolic spray. The patient appeared to be doing well for the first two days, and the temperature never rose above 99.8° . On the morning of the 22d, however, labour came on, and a child, which presented by the breech, was delivered stillborn. Though there was very little hemorrhage by the vagina, a great deal occurred through the drainage-tube. On the 23d the temperature was normal, but hemorrhage still went on through the drainage-tube, and she died, apparently from loss of blood, on the 24th. The author attributed the secondary hemorrhage to the shrinking of the uterus in the expulsion of the foetus, and consequent further detachment of the extra-uterine placenta from its posterior wall. Both foetuses appeared to be of about six and a half months' development, but the extra-uterine foetus weighed only one pound and a half, the intra-uterine two pounds and three-quarters. A review was appended of similar recorded cases; in all of which the extra-uterine pregnancy appeared to have been of the abdominal form, while in none of them was a complete diagnosis made while both foetuses remained within the abdomen.

Dr. ROUTH congratulated the author on his skill and power of diagnosis. It appeared that death was due to the further detachment of the placenta in labour, and he suggested that it would have been expedient to reopen the abdomen, and arrest hemorrhage by the actual cautery. He had seen adhesions in ovariectomy, even adhesions to the liver, successfully treated by the actual cautery.

Dr. DUNCAN regarded uncontrollable hemorrhage as the great difficulty in surgical interference with extra-uterine pregnancy, and this even many months after the death of the foetus. He did not look with much hope on the actual cautery as a means of arresting this or any other kind of hemorrhage, as he had used it, and seen it used, in vain.

Dr. GALABIN said that, on account of the distance of the patient, he had not had the opportunity of deciding on the expediency of reopening the abdomen. He thought that a styptic, such as perchloride of iron, would be more effectual than the actual cautery in arresting hemorrhage in such a case.

Phlegmasia Dolens with Lymphatic Varix.

Dr. MATTHEWS DUNCAN, at a late meeting of the Obstetrical Society of London (*Med. Times and Gaz.*, May 28, 1881), read a paper on a case of phlegmasia dolens with lymphatic varix. The author was disposed to support the view of Tilbury Fox and others, that phlegmasia dolens is due to venous and lymphatic inflammation and obstruction, and that of these two the lymphatic disease is the more important, especially as being probably present in every case, while the venous disease is occasionally absent. The case of white-leg occurred in the downward progress of a characteristic case of cancer of the womb. During its presence there appeared lymphangiectasis of a part of the skin of the thigh, and

this disappeared as the phlegmasia disappeared. The part visibly affected was at the upper and outer part of the anterior surface of the left thigh, and constituted an oval or triangular area, broader above than below, and of such extent as might be nearly covered by the hand. There was no pain or tenderness. The projecting vessels, covered by epidermis having a yellowish-white tint and pearly lustre, were seen and felt, and the prick of the small point of a knife allowed a large drop of limpid lymph to immediately exude. A similar affection of lymphatics occurred during a slight attack of phlegmasia in the right limb, which began as the disease was slowly disappearing from the left. The lymphangiectasis occurred in an area of skin mechanically weakened by being the seat of closely set spindle-shaped ribbon-like skin-cracks. These cracks were obscured by the lymphatic distension, and did not subsequently become again visible as skin-cracks, except in small parts. The lymphangiectasis was probably the result of general lymphatic tension in the whole limb, the special varicose lymphatics becoming so in consequence of being imperfectly supported by the weakened cracked skin. Similar phenomena were observed in the abdominal skin-cracks of pregnancy, under circumstances not regarded as morbid.

Dr. PLAYFAIR said that many clinical facts proved that thrombosis of the veins was not of itself sufficient to account for the phenomena of the disease. Thus, there were cases of thrombosis of the veins of the lower extremities, occurring in gouty subjects, in connection with which nothing like phlegmasia dolens was observed. Dr. Duncan's cases showed the probably intimate relation between a certain amount of septic absorption and phlegmasia, which was not uncommon in connection with cancer of the uterus. He did not think that there was ground for assuming that lymphatic obstruction had more to do with phlegmasia than venous obstruction. He had never seen any lymphangiectasis in puerperal cases, and in some instances thrombosis of pulmonary arteries preceded the phlegmasia.

Dr. GRAILY HEWITT thought that there was no doubt that in typical cases of this disease both lymphatics and veins were affected. It was known that the venous obstruction originated in coagulation in the uterine sinuses extending to the iliac trunk, and it was probable that the lymphatic thrombosis occurred in a similar way.

Dr. DUNCAN would not attempt to estimate precisely the comparative influence in phlegmasia of venous and of lymphatic obstruction. He would only say that while sometimes venous obstruction was certainly absent, we could not say the same of lymphatic obstruction.

Aphthous Vulvitis and Gangrene of the Vulva in Children.

Dr. PARROT contributes to the March number of the *Rev. de Méd.* an exhaustive treatise on aphthous vulvitis in infants, founded upon an experience derived from 56 cases. Premising that the disease, even under this name, was known to Hippocrates, he proceeds to describe the result of his own observations. Whilst the vulva, especially the labia majora, and less often the labia minora and clitoris, are the constant seat of the disease, it is not necessarily limited to them, but often extends to neighbouring parts, such as the perineum, margin of the anus, the genito-crural folds, and groins, in different degrees of frequency, in the order enumerated. The appearance of the disease varies at different stages. At the onset, it consists of small rounded or semi-spheroidal elevations of the epidermis, pale, or grayish-white, often depressed in their centre, and with a diameter of 1 to 4 millimetres, and closely resembling buccal aphthous patches. The surrounding integument is usually but slightly affected, though sometimes red, and slightly swollen. They vary in number from six to fifteen, isolated or in

groups, sometimes confluent. This condition lasts from thirty-six hours to three days, and is followed by the second stage, which is marked by ulcers with a gray or yellowish base, surrounded by a red zone, and accompanied by pruritus, which is often severe, and necessitates the employment of some means of restraint from scratching. When the ulceration extends, its edges are raised, and the neighbouring parts much swollen, and of a bright red, especially the labia minora and clitoris. This ulcerative stage constitutes the acme of the disease, whatever its subsequent course, and doubtless, Dr. Parrot observes, may be recovered from without treatment in healthy subjects; though, since all his cases were subjected to systematic treatment, with the result of rapid improvement, he cannot assert this to be the case. Under unfavourable conditions, the ulceration gives place to gangrene, which is not to be regarded, properly speaking, as a complication of aphthous vulvitis, but rather a modification or one of the forms of the disease, which manifests itself under as yet little known conditions. The gangrene may spread to an enormous extent, involving the perineum, rectum, and integuments around the coccyx, large moist eschars sloughing away, leaving deep excavations. Even from such extensive destruction, recovery may take place with remarkable completeness of restoration, the reparative process seeming to vie with the destructive.

The extent to which the system is affected by the local affection, whilst in the aphthous and ulcerative stages, is but slight, and is involved in the general febrile state (measles, etc.) to which the disease is secondary. With the existence of gangrene, the usual severe constitutional symptoms set in, and may be fatal. In those cases which do not proceed to gangrene it is noticeable that the ulcers which spread over the perineum and the rectal mucous membrane extend more rapidly and last longer than those in other regions, probably because of their liability to disturbance and irritation by the excretions. Careful examination of these parts is, therefore, necessary before pronouncing that a cure is effected. It is a remarkable circumstance that enlargement of the lymphatic glands does not occur, or only to the slightest extent. The diagnosis of aphthous vulvitis is easy. The infecting chancre has its own characteristics, and affects the lymphatic glands. The vulvitis, which is often associated with variola and varicella, is indistinguishable from the aphthous form, but the eruption of these diseases reveals the nature of the case. Among the more interesting points in connection with the etiology of the disease are: 1. The age, the majority of the cases occurring from the second to the fourth year, the youngest of the 56 children being twenty months old, and the eldest $7\frac{1}{2}$ years. 2. The influence exercised by other maladies. Of the 56, there were associated with measles, 39; with whooping-cough, 4; with varicella, erysipelas, pneumonia, and diphtheria, 1 each; and 9 independently of any other disease. The marked frequency of measles compels us to assume some intimate relation between these two states. What this is, the author confesses himself ignorant of; but he points out that measles leads in many cases to an ulceration of the antero-external surfaces of the arytenoid cartilages, though not of an aphthous character. All the cases of gangrene were observed in children the subjects of measles, which may be explained by a tendency of the febrile blood to form thrombi in the pudendal vessels.

It is difficult to state the duration of the disease, but the most intractable ulcers yielded to treatment within eight days. Dr. Parrot does not hesitate to give a favourable prognosis in all cases, recovery from the local affection taking place even when the primary disease may be fatal. The treatment adopted by the author since 1873, whatever the stage of the disease, is to cover all the affected

area with a uniform layer of iodoform, and over that a covering of lint. One application will often effect a cure, and rarely more than three are necessary, at intervals of twenty-four hours, preceded by careful washing of the parts. This treatment is sedative rather than painful, and since it has been pursued, cases of gangrene, which, under the old methods of poultices, charcoal powders, alcoholic applications, chlorate of potash, nitrate of silver, etc., were frequent, are now unknown.—*London Med. Record*, May 15, 1881.

Ovariectomy and Pregnancy.

The following three cases are related by Dr. J. PIPPINGSKÖLD in the *Finska Läkarsällsk. Handlingar*, Band xxii.:—

CASE I. A. L. M., aged 41, menstruated first at the age of 15, and was married at 18. She had had ten labours, the last two and a half years since. A tumour was first observed in March, 1877; the menses had become irregular, and ceased in July, 1878. She was admitted to hospital at the end of January, 1879. Three days later, twelve and a half litres of ropy colloid material were removed by tapping. On the last day of February dyspnoea had increased, and pains resembling those of labour had set in; she was now again tapped, but only two and two-third litres of watery fluid escaped. As she had severe orthopnoea, and became worse during the next two days, ovariectomy was performed. As soon as a large portion of the contents of the cyst had been removed, she was found to be pregnant; the possibility of this had been borne in mind before the operation. The pedicle was cauterized, and secured by eleven ligatures. Immediately after the operation, the labour-pains, which had probably commenced during the previous night, became more powerful; seven hours later, the liquor amnii escaped, and a dead child was soon afterwards born. Dr. Pippingsköld attributes the death of the fœtus to extravasation into the placenta, and believes that it might have been born alive if the operation had been performed fourteen days earlier.

CASE II. L. S., aged 34, married six years, had two living children (the youngest three years old), had miscarried at the sixth month with twins two years before her admission to hospital in July, 1877. The catamenia, which had been normal, had disappeared three months previously. The abdomen had gradually enlarged after the miscarriage. The diagnosis of an ovarian cystic tumour on the left side was made. Ovariectomy was performed on July 27; on the eleventh day the patient left her bed, and returned home a few weeks afterwards. She was delivered of a fine girl on November 3.

CASE III. In the beginning of April, 1878, Mrs. A. was sent to Dr. Pippingsköld by another medical practitioner, who had diagnosed an ovarian cyst in combination with ascites. The patient was 24 years of age; she had been married three and a half years, and had had two children, the youngest being one and a half years old. After her last confinement, her abdomen began to enlarge, and was, when Dr. Pippingsköld first saw her, greatly distended; she had also prolapse of the uterus. A preliminary tapping was performed; after which an abdominal bandage was applied for twelve weeks, with a glycerine tampon, compress, and T-bandage to the uterus. On June 23, ovariectomy was performed; the cyst was found to be connected with the right ovary. On the left ovary were three small cysts with clear serous contents, which were opened and cauterized. The patient was kept in bed five weeks, during which a glycerine tampon was daily introduced into the vagina. She menstruated normally in July. After she had left her bed, the uterus was found to be in its normal position, and re-

mained so. On October 28, 1879, she was delivered of a child weighing more than ten and a half pounds, and made a good recovery.—*London Med. Record*, May 15, 1881.

Removal of Uterine Appendages for the Arrest of Uterine Hemorrhages.

At a late meeting of the Royal Medical and Chirurgical Society (*Lancet*, May 28, 1881), Mr. LAWSON TAIT read a paper on this subject. He referred to the use of the statistical method in testing the real value of operations, and especially instanced ovariectomy as one which would not have obtained the complete acceptance it has received had not the careful statistical method of Mr. Spencer Wells shown that its results could be favourably compared with those of every other major operation in surgery. Mr. Lawson Tait wished to lay his experience before the Society, in order to obtain its decision as a guide for the future for himself and others. After protracted trials of drugs for the arrest of uterine hemorrhage, he had come to the conclusion that all were absolutely without effect, save ergot and two salts of potash, the chlorate and the bromide, and these were by no means uniformly successful in giving permanent relief. In all the cases he had to relate these drugs had been fully tried before the question of operating was discussed. He had entitled his paper "The Removal of the Uterine Appendages," because his experience seemed to show that the removal of the ovaries was not a certain method of arresting menstruation, while removal of the tubes as well seemed to be so.

The author then related thirty-one cases, of which four were fatal, twenty-seven recovering from the operation. A summary table was appended to the paper, which was a complete list of the operations and results.

The author summed up with the following conclusions, which he considered might be legitimately drawn from them. 1. That, so far as its primary results are concerned, removal of the uterine appendages for the arrest of intractable uterine hemorrhage is an operation which is quite as easily justified as any of the major operations of surgery. 2. That so far as its secondary results are yet known it is an operation which yields abundant encouragement for its further trial; as conclusions which are indicated but not wholly proved, he thought he might formulate a statement that removal of the ovaries alone is not sufficient to arrest menstruation, but that removal of both tubes and ovaries does at once arrest it. So far as some of these cases have gone the arrest would seem to be permanent. This conclusion is quite in harmony with what is known of removal of both ovaries for large cystomata, for in such cases the tubes are almost uniformly included in the clamp or ligature. Three at least of the cases, and probably two others, show that the arrest of menstruation by this means leads or may lead to the atrophy of uterine myoma. Finally, there is some close connection, here pointed out, he believed, for the first time, and worthy of very close study, between uterine myoma and its accompanying hemorrhages and cystic disease of the ovaries. In two of the cases cystic disease seemed to be the cause of the hemorrhage without any myoma intervening. One other conclusion, he thought, was justified, that the whole subject is worthy of careful study, and should not be made the subject of premature and hostile conclusions.

MEDICAL NEWS.

NOT A FAILURE OF VACCINATION AS A PROPHYLACTIC.

It can scarcely be doubted that the surest way to overcome the assailants of our great safeguard against variola is to determine with absolute accuracy the limits of its protective power, in order that we may not enthusiastically claim too much for Jenner's beneficent discovery. Hence a careful consideration of circumstances attending the recent complete destruction of a band of Esquimaux in France by smallpox is especially important at the present time, when vaccination is being so violently attacked by many ignorant or prejudiced enemies. From the official report of Dr. Leon Colin (Professor d'Epidémiologie du Val de Grâce), made after a thorough investigation of the whole subject, we learn that a party of eight Esquimaux brought from their native Labrador (probably to take part in some kind of exhibition or theatrical performance) disembarked at Hamburg the 26th of September, 1880, and visited in succession Berlin, Prague, and Frankfort, arriving at Darmstadt on the 13th of December, stopping at Crefeld, a small town of Rhenish Prussia, from the 18th to the 30th of that month, and reaching Paris, where they were taken to the Jardin d'Acclimation, on the last day of the year. On the 14th of September, just two weeks after leaving Prague, where an epidemic of variola was raging, a young girl of the troupe died of smallpox, the eruption being fairly apparent. At Crefeld, thirteen days afterward, the wife of one of the party died with the symptoms of hemorrhagic smallpox, but without any eruption being visible, and on the 31st of December, at the same place, another young girl died, exhibiting the characteristic eruption.

On the 1st of January, the day after their arrival, the remaining five Esquimaux were carefully vaccinated with animal vaccine virus, which had been preserved in tubes, and five days later the operation was repeated, in both instances, however, unfortunately without effect. This failure is attributed by Dr. Colin to the fact that, the systems of the Esquimaux being already infected with the variolous poison, they were all on both occasions in that stage of incubation of smallpox in which want of success in vaccination is (he states) the rule. It seems strange that, in view of the great previous mortality among the troupe, arm to arm vaccination was not daily practised, and varied, indeed, to different parts of the body, in order to give these unhappy exiles a chance of deliverance from the terrible disease which proved fatal to them all before the middle of January. And yet it is obvious that the time when the prophylactic should have been applied was when they first landed in Hamburg, or certainly at Prague, which was known to be the seat of an epidemic, or at any rate at Darmstadt, when

the death of a first victim, marked with the characteristic eruption, gave a primary signal of the terrible danger to which the whole band was exposed. But since the precaution was not thus resorted to *in time*, it is equally manifest that there is no proof that the failure of vaccination to protect these unfortunates from smallpox was due to aught but a neglect of the proper method of its timely application, or in any sense owing to a deficiency in its prophylactic power.

The fact that all of the patients in this lamentable series of cases died after a few days' illness, and two of them without showing any eruption, suggested to some medical men in Paris that variola was here so modified by racial peculiarities, or other causes, as to be less amenable to the influence of vaccination. But if we investigate the course of smallpox in nations among whom it has not previously been prevalent, and where consequently there is, so to speak, a new field opened to its ravages, we will find that it has often in the past history of mankind manifested the same virulence and fatality. The circumstance also that no epidemic of variola seems to have been originated by these Esquimaux, strongly indicates that for their associates and caretakers, a certain amount of *inherited* insusceptibility (which probably exists in the inhabitants of countries, where smallpox frequently occurs, and weeds out, as it were, the families which are most easily affected by its poison) combined with the *acquired* protective influence of vaccinia to preserve them from its deadly power. All the employes of the Garden of Acclimation were re-vaccinated with human vaccine lymph taken from the arm of an infant on the eighth day, the apartments occupied by the Esquimaux were disinfected with sulphurous acid, and their effects either burned, or purified by prolonged exposure to boiling or to dry heat of high degree. The Parisian Council of Health, in seeking to profit by this remarkable example, urges upon the proper authorities, the prompt vaccination immediately upon landing of all foreigners arriving at French ports, from countries such as Labrador, where neither prevalent variola nor vaccine disease has tested their susceptibility to smallpox. This wise precaution might well be adopted here in America in regard to the arriving emigrants, annually crowding to our shores from regions where systematic vaccination and re-vaccination are neglected, especially as the health reports of our western States record numerous local epidemics, the germs for which have been imported by Scandinavian and other settlers. Furthermore, the Council earnestly advocates the missionary work of introduction as rapidly as possible of the process of vaccination among the various nations to whom it is comparatively unknown; pointing out that the operation would not only preserve a few individuals from the perils of variola attending a voyage to Europe, but would protect whole populations from danger by the germs of smallpox, imported by sailors or travellers, to which they are continually more or less exposed without its aid.

INFECTED MEAT.

A short time since we called the attention of our readers to the danger of tuberculosis being transmitted by the ingestion of diseased meat, and the recent panic on the continent of Europe in regard to trichinosis in pork indicates that a knowledge of the exact extent of other dangers from infected animal food can scarcely be too often or too earnestly urged upon the community at large. Strenuous efforts, evidently inspired by the immense pecuniary interest involved, have been made to allay popular anxiety on this point, and a late account states that, among four hundred hogs examined at random in Chicago, no trace of *Trichina* was discovered. Investigations, which we may readily suppose were less partial, and, therefore, more searching, place the number of American hogs infected with trichina at four per cent., and when we consider that a large proportion of the cats and rats in cities contain trichina, and are occasionally eaten by swine, we comprehend at once why the wise old Hebrew law-giver forbade pork to his followers. The obvious reason for our comparative immunity in this country from epidemics of trichinosis is found in our habit of *thoroughly cooking* all animal food, a culinary precaution which is infallible, and should never be omitted. Any one interested in this subject may consult with profit Dr. Noah Cressy's address on "Diseased Meat and its Consequences upon our Health and Happiness," published at Hartford, Conn., last year.

The American Laryngological Association.—The third annual congress of this Association convened in Philadelphia, on May 9, 1881, and continued until May 11th, holding morning and afternoon sessions. The meeting was held in the Hall of the College of Physicians, the use of which had been tendered by the College to the Association. A full attendance of the Fellows was present, and a number of candidates were elected. The meeting was presided over by Dr. J. Solis Cohen, and the papers presented were of great interest, and, as a rule, practical in their character; the discussions were spirited. Entertainments were tendered the Association by the President; and by the Philadelphia Laryngological Association. An excursion to Atlantic City on the afternoon of the last day concluded the exercises of the meeting, which was considered the most successful that has yet been held by the Association.

First Day's Proceedings.—The President, Dr. J. Solis Cohen, opened the session, at 10.30 A. M., on Monday, May 9th. Dr. Harrison Allen made a brief address of welcome, and the President then read his annual address.

The reading of papers being next in order, Dr. Frederick J. Knight, of Boston, read a clinical paper on Lupus Laryngis, followed by one on Lupus of the Pharynx and Larynx, by Dr. Morris J. Asch, of New York, which led to considerable discussion, in which a remarkable variety of opinions were upheld regarding the pathology of Lupus.

Dr. Andrew H. Smith, of New York, read a communication on Certain Neuroses of the Throat, in which laryngeal disorder was shown to exist in some cases as the result of reflex irritation, frequently uterine in its origin.

In the afternoon, papers were read by Dr. Beverley Robinson, of New York,

on the Laryngeal Affections of Pulmonary Phthisis; by Dr. Wm. Porter, of St. Louis, on the Prognosis of Laryngeal Phthisis, and by Dr. F. H. Bosworth, of New York, on Tubercular Ulceration of the Mouth, with a report of Cases. In their essays, and in the discussion following them, a more hopeful view of the prognosis of laryngeal phthisis was given than is generally stated; the treatment being largely local by means of medicated sprays.

Second Day.—A business meeting was held from 10 to 11 o'clock, at which candidates were balloted for, and other private business transacted; reports of the Treasurer, of the Committee on Nomenclature, and of the Publication Committee were received and approved. The following were elected to active membership: Drs. D. Bryson Delavan, of New York; Urban G. Hitchcock, of New York; George W. Major, of Montreal; Ethelbert C. Morgan, of Washington; Herman Mynter, of Buffalo, and J. W. Robinson, of Detroit.

In regard to the following question, referred by the Council to the Association for their decision: Shall the inaugural theses of candidates for Fellowship be published as a part of the transactions of the Association in the Annual Volume? it was decided that it should be left to the discretion of the Council at each annual meeting.

Dr. Louis Elsberg, of New York, read a Contribution to the Histology of the Thyroid Cartilage, in which recent views on the structure of so-called hyaline cartilage structure were discussed, and the bio-plasmic character of the inter-cellular material maintained. He also exhibited an improved apparatus, by which the calcium light was made available for office use for laryngoscopic examinations, and, secondly, Trouvé's Galvanic Accumulator for illumination and cautery purposes. The President said that he had tried it as a means of illumination and for actual cautery, but it had not been satisfactory in his hands.

Dr. Wm. C. Glasgow, of St. Louis, read a paper On the Operation for Deviation of the Nasal Septum, in which Steele's method of cutting the cartilage by radiating incisions and restoring its position by pressure was advocated. The paper was freely discussed, this operation not being sanctioned by the Society generally.

An interesting essay, by Dr. Carl Seiler, upon the Effect of the Condition of the Nasal Cavities upon Articulate Speech, was listened to with marked attention, as it discussed the physical conditions of articulation and the functions of the upper air-passages in speech.

By permission, Dr. J. O. Roe, of Rochester, reported a curious case of Laryngeal Whistling; Dr. Glasgow also read a volunteer paper, containing the notes of a case of paralysis of the abductor muscles of the larynx.

Dr. Clinton Wagner read a paper On Sub-Hyoidean Pharyngotomy for the Removal of the Epiglottis, with an illustrative case; in which the advantages of the horizontal wound were discussed, and its enlargement by an antero-posterior incision recommended (a T incision) in difficult cases.

The question of Hemorrhage after Tonsillotomy was discussed by Dr. Geo. M. Lefferts, of New York, and the danger of serious bleeding pointed out, due, in the author's opinion, to section of the enlarged branches of the ascending pharyngeal arteries of the external carotid, rather than to the trunk of the internal carotid, as is usually stated by writers. In the free discussion which followed, the comparative advantages of the guillotine, the bistoury, the galvano-cautery, and the destruction by caustic applications, each found advocates.

A paper, by Dr. C. E. Sajous, on Paralysis of the Vocal Cords due to lead-poisoning, was read by title.

Third Day.—Dr. Wm. C. Jarvis read a paper on Chronic Irritative Hypersemia of the Larynx, which was favourably discussed by Drs. Elsberg, Shurley,

A. H. Smith, Seiler, Cohen, and Bosworth. Dr. Jarvis also exhibited an ingenious instrument for removing hypertrophied tissue from the inferior turbinated bone.

Dr. J. O. Roe read a paper on the Comparative Value of Atomized Fluids in the Treatment of Diseases of the Larynx, which advocated this method of medication.

Dr. Delavan, of New York, by permission, also exhibited an instrument, which was an inverted Süss's tube for throwing an upward spray into the pharynx, and which was considered by several fellows as a decided improvement.

Dr. Wm. H. Daly concluded the public exercises by reading a communication upon the Relations of Hay Asthma and Nasal Catarrh, and the Congress went into executive session.

On motion of Dr. Knight, it was resolved that fellows who take no active interest, either by paper or presence, in the sessions of the Congress for a period of three years, may, unless proper and satisfactory excuse to the Council be made, be dropped from the roll.

A communication was received from the editor of the *Archives of Laryngology*. On motion, the whole subject of publication of proceedings was referred to the Council with power.

The following fellows were elected Delegates to the Subsection on Laryngology of the International Medical Congress of 1881: Drs. Cohen, Lefferts, Lincoln, and Bosworth.

On recommendation of the Council, Dr. Morell Mackenzie, of London, was elected an honorary fellow, and Drs. M. Krishaber, Paris, L. Mandel, Paris, Karl Stoerck, Vienna, Leopold Schrötter, Vienna, Felix Semon, London, and R. Voltolini, Breslau, were elected corresponding fellows.

The following officers were duly elected for the succeeding year: *President*, Dr. F. J. Knight, of Boston. *Vice-Presidents*, Drs. E. L. Shurley, of Detroit; Wm. Porter, of St. Louis. *Member of Council*, Dr. Harrison Allen, of Phila.

Next place of meeting, Niagara Falls, N. Y., during the month of June, the exact date to be decided by the Council, so that it shall not interfere with the meeting of the American Medical Association.

After the customary votes of thanks, the Association adjourned.

The Pennsylvania State Medical Society.—The thirty-second annual meeting of the State Medical Society was held at Lancaster, Penna., on May 11th, 12th, and 13th, 1881. It was the largest meeting of this Society that has ever been held, nearly three hundred members signing the register. The session was harmonious, and the proceedings were enlivened by many interesting papers and appreciative discussions.

The formal opening of the meeting by prayer was followed by an Address of Welcome from Dr. Henry Carpenter, of Lancaster.

Dr. Allis offered a resolution that the Philadelphia County Medical Society be made custodian of the publication of the Proceedings of the Pennsylvania State Medical Society and of the Transactions of such other State medical societies as shall exchange with it, until the Pennsylvania State Medical Society shall make other provisions for the same, and that the Publishing Committee shall be a Library Committee to report to next meeting of this Society. Adopted.

Dr. Sutton offered the following, which lies over under the rule:—

Section 2, Article III., of the Constitution shall be so amended as to read as follows:—

Every member of a county medical society in Pennsylvania shall, so long as he

is in good standing, be a member of the State Medical Society and a delegate to its annual sessions.

In the afternoon, Dr. Albert H. Smith, of Philadelphia, offered a resolution in regard to giving the control of female insane patients in hospitals exclusively to women, and calling upon the Legislature to recognize this principle in making its appointments for the hospital at Warren, as had been done elsewhere in the State. After some discussion it was made the special order for the succeeding day.

Dr. S. M. Ross, of Blair Co., read the Address in Surgery, and several other papers were read, including one by Dr. S. D. Risley upon Diseases of the Lachrymal Passages, and one on the Pathology of Shock, by Dr. C. C. Seabrook, in which the phenomena are declared to be due to a paralyzing effect upon the vasomotor centre in the medulla oblongata.

The President's Annual Address, by Dr. John T. Carpenter, of Schuylkill Co., was mainly devoted to the discussion of the management of the insane. He pointed out the defective system of treatment prevailing in many asylums in the United States, and urged the adoption of some comprehensive system of superintendence of all the insane hospitals, with a view of securing an approach to uniformity in classification and administration.

A complimentary musical entertainment was given to the delegates, at the close of the President's Address, at Fulton Hall, which was well attended.

Second day.—After the appointment of the Nominating Committee, the resolution of Dr. Smith came up for action, and after considerable discussion the motion was lost. Several other amendments were adopted.

The amendment to the Constitution offered by Dr. Carpenter last year, allowing representation of the College of Physicians of Philadelphia, also failed to be adopted.

Dr. S. S. Schultz, of Danville, read a very interesting Report on Mental Disorders, in which the want of sufficient accommodation for the insane in our public institutions was pointed out, the number of the insane in our constantly growing population being steadily on the increase; he estimated the number of insane poor in this commonwealth at nearly 6000.

In a volunteer paper, Dr. John Curwen, of Dauphin Co., insisted upon the value of rest and careful attention to nutrition as restorative agents in nervous disease.

This was followed by an interesting communication from Dr. Traill Green, of Easton, entitled "The State Medical Society and the Preparatory Education of Medical Students," in which great stress was laid upon the necessity of proper preliminary studies for medical students.

Dr. O. H. Allis also read a paper upon the same question, "In what should Preliminary Examinations consist, and what step should be taken to make them uniform throughout the State?"

Dr. W. M. Findlay, of Blair Co., offered the following, which was adopted:—

Resolved, That a committee be appointed to prepare a schedule of subjects on which applicants for permission to study medicine shall be examined by the Board of Examiners of county societies.

The President appointed on this committee to report at the next meeting, Drs. O. H. Allis, Traill Green, W. R. Findlay, John B. Roberts, and W. B. Ulrich.

At the afternoon session, Dr. Wm. Goodell read a paper on "The Extirpation of the Ovaries for Insanity," in which some illustrative cases were reported, showing the value of this procedure in certain cases; the author noticing the strong hereditary tendency of mental disease, advocated the trial of this operation, which possessed the incidental advantage of preventing the propagation of insanity.

Dr. J. Aug. Uhler, Chairman of Committee on Nominations, made the following report: *President*, Jacob L. Ziegler, of Mount Joy. *Vice-Presidents*, 1. Jos. A. Reed, of Allegheny; 2. W. L. Roland, of York; 3. J. W. Houston, of Chester; 4. W. Murray Weidman, of Berks. *Place of Meeting*, Titusville, Crawford County, on second Wednesday of May, 1882. Adopted.

A Report on the State Board of Health was presented by the Permanent Secretary.

On motion John Norris, Esq., of the *Philadelphia Record* was allowed to address the association upon the progress of the bill to create a State Board of Health. A vote of thanks was subsequently tendered the *Record* for its services in aid of medical legislation and medical reform. Dr. R. L. Sibbett, of Carlisle, presented a report on Medical Legislation, which was adopted. A resolution was passed indorsing the bill then before the State Legislature for creating a State Board of Health, and regulating the practice of medicine.

Dr. Benjamin Lee, of Philadelphia, read the Annual Address on Hygiene, in which he discussed certain matters connected with the purity of the atmosphere, especially in large cities, calling especial attention to the dangers of inhaling street-dust, and of breathing sewer-gas in the houses; and recommending a mercury valve for water-closets.

Dr. R. G. Curtin, of Philadelphia, read a paper on Catarrhal Inflammation of the Pancreas, a heretofore undescribed Disease. The principal symptoms were diarrhoea, with fatty stools, followed by dyspepsia, and later symptoms of anæmia and starvation, to be treated in the early stages by the use of food containing little oily matter and innunction of oil by the skin.

Dr. O. H. Allis gave a short lecture on Why Deformity so frequently follows Fracture of the Lower End of the Humerus? and Why Fractures just above or below the Knee are so dangerous?—the latter being on account of the danger of hemorrhage, the former being due to rotation of the fragments, and vicious union. He recommended keeping the arm extended during the treatment of fracture of the condyles of the humerus, in order to prevent the sliding of the fragment.

Dr. Tyson read a short paper upon the Pathology of Albuminuria, which, with the preceding, was ordered to be published.

Third day.—Dr. Laurence Turnbull read a paper enlarging upon the dangers of Defective Hearing in Locomotive Engineers, and at his recommendation a resolution was adopted referring the consideration of the subject to a commission. He was then appointed Chairman of a committee to bring the subject before the railroad authorities, and to draft a memorial to present to the State Legislature.

The Address in Medicine by Dr. J. Solis Cohen, in which some new remedies were discussed and their dangers indicated, was well received, and led to an interesting discussion.

Dr. R. J. Levis explained his method of treating Hydrocele and Cystic Tumours by the Injection of Carbolic Acid (full strength from 20–60 minims may be used, half a drachm being usually sufficient).

Dr. Jacob Price read a practical paper on The Importance of Local Treatment in Congestion and Inflammation of the Cervix Uteri in Pregnancy, whose title indicates its scope. The local application used most frequently consisted of equal parts of iodine, phenol, and tannin, in four parts of glycerine.

The President appointed Dr. Chas. K. Mills to deliver the Address on Nervous Disorders at the next annual meeting.

The new incumbent, Dr. J. L. Ziegler, was escorted to the presidential chair, and the meeting was then adjourned.

The Sanitary Measures proposed by the National Board of Health for the control of New Orleans during the present Summer.—The National Board, in a letter to Dr. S. E. Chaillé, as Supervising Inspector, has set forth explicit instructions for his guidance. The Board desires to obtain the earliest possible information of the existence of yellow fever in New Orleans or its vicinity; to secure free commercial intercourse between New Orleans and other points, so long as such intercourse is unattended with danger; to so arrange matters when such intercourse must be restricted as to cause no more interference than is absolutely necessary; and in case of the appearance of yellow fever, to co-operate in every way to limit the spread of the disease and to stamp it out if possible. The Board of Health of Memphis, Tenn., of Shelby County, Tenn., and of Vicksburg, La., have communicated resolutions to the National Board, requesting early and efficient action on its part, anticipating the coming summer season as a critical one, and requiring clean bills of health, or inspection certificates, issued or countersigned by an inspecting officer of the National Board, from all water or land travel where it is deemed necessary, the Shelby County Board of Health also tendering the quarantine grounds and building on President's Island to the National Board for use as an inspection station.

The proper enforcement of these ordinances requires that the Supervising Inspector shall obtain suitable co-operation and information from the health authorities and physicians of New Orleans and the river parishes below New Orleans; and, in furtherance of this object, the State Board of Health of Louisiana have tendered the use of a commodious room adjoining its own rooms to the inspector, and have requested his attendance at the meetings of the Board. The details of the instructions to the Supervising Inspector comprise regular daily reports from a National Board inspector at the Mississippi River Quarantine Station, who, in cases of difference between himself and the quarantine inspector, furnishes reports to both the Supervising Inspector and the President of the Louisiana Board of Health. All reports of deaths, in doubtful and suspicious cases, to be properly investigated, and information as to the presence of cases of yellow fever, or cases which are doubtful or suspicious to be furnished by request of health authorities of other States and municipalities, with the approval of the resident member of the Board and independent of the co-operation of the local board. Caution is enjoined in determining what constitutes dangerous infection to avoid, as far as possible, any undue restriction upon travel or traffic. The inspection of steamboats was to commence with the first of May, as conducted last year; two inspectors, and when necessary two sanitary policemen, being employed. No rigid railroad inspection further than the examination of freights is as yet recommended. The Supervising Inspector is advised to secure the co-operation of the Louisiana State Board of Health, so as to cause the passage by them of an ordinance similar to "resolution No. 6," as passed by the Sanitary Council of the Mississippi Valley, which, in effect, establishes a careful inspection of ships at Eadsport, the proper certificate from the inspector of the National Board at Ship Island Quarantine Station to be the only authority which would allow a vessel from infected ports to pass without inspection.

The Louisiana State Board of Health, at its meeting of May 19th, adopted the report of Dr. Formento, which was based upon these instructions to Dr. Chaillé, and which renders them nugatory in almost every particular, so far as the co-operation of the Board is concerned. Ship Island was not considered suitable for a quarantine station, and if it were, the State Board would not feel warranted in using it as such. The only station which the Board thought suitable was the State Mississippi River Quarantine Station, as the best equipped and

organized outside of New York. The Board also took occasion to express its want of sympathy with the Mississippi Valley Sanitary Organization.

The National Board of Health, at its recent meeting, June 1st and 2d, has, it seems, taken no further action upon this condition of things.

Scarlet Fever in Charleston.—Dr. F. PEYRE PORCHER, of Charleston, writes us that "a severe epidemic of scarlet fever prevails in this city, many deaths have occurred in children—the throat being generally involved. As usual the cases vary; sometimes the eruption being not prominent. Deaths have occurred forty-eight hours after the invasion. Many recover. We are of the opinion that safety will be found in early treatment, by efforts to reduce the fever of the first few hours by fever mixtures, by repeated warm baths, cold sponging to the head and arms, and application to the throat externally and internally—Labarraque's solution of chlorinated soda and chlorate of potash being admirable in the composition of internal applications to the throat. Many have used a solution of sulphide of sodium as a prophylactic (3j to water Oj—dessertspoonful t. i. d.), as recommended first, we believe, by Prof. Elliott, of Sevannee. We know of three instances where children had the disease, in a mild form, through taking this substance regularly.

"We prefer, and have used for this purpose, a combination of chlorate of potash, quinia, and hyposulphite of soda,¹ which we long since suggested and employed as the best prophylactic in diphtheria—to be taken by those exposed to these diseases. It is besides harmless and an excellent tonic. Some children of black persons have had the scarlet fever here, but there has been a most singular exemption in this race. The proportion of whites to blacks seized has, we believe, been as 100 to 1—perhaps much higher than this."

International Medical Congress, London, 1881.—The following general arrangements for the meeting of the Congress are announced.

An informal reception will take place at the Royal College of Physicians, Pall-mall East, on Tuesday afternoon, August 2, from 3 P. M. to 6 P. M., at which the Executive and Reception Committees will meet the members of the Congress. The opening meeting of the Congress will be held in St. James's Great Hall on Wednesday, August 3, at 11 A. M. Entrances in Regent Street and Piccadilly. The other general meetings will be held in the Theatre of the University of London.

The Congress will be organized on Wednesday August 3. In the evening a conversazione at South Kensington Museum will be given by the English members of the Congress to the foreign members.

On Thursday Aug. 4, an address will be delivered by Prof. Maurice Reynaud, of Paris, on "*Le Septicisme en Médecine, au temps passé et au temps présent.*" In the evening a banquet will be given at the Mansion House to certain members of the Congress by the Lord Mayor of London.

On Friday Aug. 5, Dr. J. S. Billings, of Washington, will deliver an address on "*Our Medical Literature,*" and in the evening a conversazione will be given at the Royal College of Surgeons.

On Saturday Aug. 6, there will be no general meeting. The Sections will meet daily from 10 A. M. to 1 P. M. In the afternoon Sir J. D. Hooker will receive at the Kew Gardens, and Mr. and Mrs. Spencer Wells, at Golder's Hill, Hampstead.

¹ R.—Chlorate of potash, 3ij; quinia, gr. xv; hyposulphite of soda, 3ij; tr. chloride of iron 3ij; water, 3viij.—Dessertspoonful t. i. d., used as a preventive.

On Sunday special services will be held at Westminster Abbey by Dean Stanley in the morning, and at St. Paul's Cathedral by Canon Liddon in the afternoon. Sir Trevor Lawrence, M.P., will entertain at luncheon a number of the members at his place at Boxhill, in Surrey.

On Monday Aug. 8, address by Prof. Volkmann, of Halle, and in the evening a dinner will be given to certain members of the Congress by the Society of Apothecaries in their Hall in Blackfriars, also a soirée in the Albert Hall.

On Tuesday Aug. 9, concluding general meeting. Address by Prof. Huxley "The Connection of the Biological Sciences with Medicine." After the conclusion of the meeting the members will be carried by special train to the Crystal Palace, and will be entertained at an informal dinner in the Concert Room. At dusk the fountains will play during a display of fireworks.

Arrangements have been made to enable the members to visit the prominent hospitals, the principal places of public interest, as well as a number of the private galleries in London. Attractive excursions have also been planned for Greenwich, Folkestone, Hampton Court, etc.

The Association of Medical Editors met at Richmond, on Monday evening, May 2. In the absence of Dr. J. F. Shrady, President, Dr. Ochterlony was called to the chair. Dr. D. S. Reynolds acted as Secretary.

Dr. Shrady's address was read and ordered to be printed.

The Committee on Nominations of Officers for the ensuing year reported as follows: President, Dr. Landon B. Edwards, Richmond, Va.; Vice-President, Dr. Ralph Walsh, of Washington; Secretary, Dr. D. S. Reynolds, of Louisville.

The Association adjourned to meet on Monday evening preceding the next Annual Meeting of the American Medical Association.

Health of New York.—The city's mortality has steadily diminished during the last month. The number of deaths for the weeks ending June 4 and 11 was, respectively, 660 and 693, while the numbers for the weeks ending May 1 and 15 were 814 and 822.

The number of new typhus fever cases developed during May was somewhat larger than in April. During the eighth week of the prevailing endemic (ending May 7), there were 28; in the ninth week 14; in the tenth week 34, and in the eleventh week (ending May 29), 13 cases were reported. Smallpox increased slightly in May, in spite of the energetic efforts of the Health Board to check its career.

The quarterly report of the Bureau of Vaccination, recently published, states that in the three months ending March 31, 3616 primary and 19,653 other vaccinations were performed by the Bureau. Several cases of smallpox have been discovered on incoming European steamships, and promptly quarantined. A number of new cases have also been reported in Brooklyn and Jersey City. On June 1 there were 129 cases of variola and 52 of typhus at the Riverside Hospital. Scarletina has decreased during May, but diphtheria has slowly gained ground, and measles has rapidly increased. German measles has prevailed in almost epidemic form for some months. It has chiefly affected very young children. The heat was less intense in the latter part of May than in the second week of that month, but was sufficient to produce 20 cases of insolation on May 21, 2 of which were fatal.

A compromise street-cleaning bill was passed by the legislature, and received the Governor's signature. Although the time granted by the Governor to the proprietors of the factories on Hunter's Point and Newtown Creek for the abate-

ment of the nuisances connected with their establishment has expired, the odours are as offensive as ever.

Indiana State Medical Society met at Indianapolis, May 18th, under the presidency of Thomas B. Harvey, M.D., of Indianapolis. The following officers were elected for the ensuing year: President, Dr. Marshall Sexton, of Rushville; Vice-President, Dr. F. J. Van Vorhis, of Indianapolis; Secretary, Dr. E. S. Elder, of Indianapolis.

Illinois State Medical Society held its thirty-first annual meeting at Chicago, May 17th, 18th, and 19th, Dr. George Wheeler Jones, of Danville, President, in the chair. A number of scientific papers were read, and the proceedings were of marked interest. The following officers were elected for the ensuing year: President, Dr. Robert Boal, of Peoria; Vice-Presidents, Drs. A. T. Darrah, of Tolono, and Ellen A. Ingersoll, of Canton; Assistant Secretary, Dr. Wm. A. Byrd, of Quincy. It was voted to hold the next meeting at Quincy.

Health of Chicago.—An epidemic of R  theln or German measles is widely spread in Chicago. There were about one hundred cases of it in the Orphan Asylum. No case of death from the disease has been reported. A mild epidemic of diarrh  a, generally referred to the drinking water, also exists. Not long ago the Desplaines River overflowed its banks and a part of its stream entered the Chicago River, flooding the city in some places and carrying filth of the worst description into the lake as far as the Crib, whence Chicago gets its supply of drinking water.

Scarlet fever, diphtheria, and smallpox are still prevalent, and the mortality from each is high.

A New Home for Inebriates.—The laying of the corner stone of the "New York Christian Home for Intemperate Men," at the corner of Madison Avenue and 86th Street, took place on June 7. The Home will accommodate about seventy-five men. The cost of the site was \$30,000, and the building expenses are estimated at about \$60,000. The Home will be constructed of brick and brown stone. It will be four stories high, and its dimensions will be 60  100 feet. There will be private rooms for those patients requiring isolation, bath-rooms, sitting-rooms, a library and a chapel. The house will be ventilated, drained, and lighted by the most approved modern methods.

Registration of Plumbers.—The bill requiring New York and Brooklyn plumbers to be registered, and to subject all their work to the inspection of the City Health Board, has become a law.

The Sick Children's Mission.—A charitable institution under the direction of the Children's Aid Society, has begun its summer work of providing sick children of the lower classes, with gratuitous nourishment, medicines, and medical attendance. Druggists in different parts of the city will furnish medicines free of charge on the presentation of authenticated prescriptions from any of the twelve physicians whose services have been secured by the Mission. Substantial food and suitable delicacies will be furnished by the superintendent of the Mission, who will also provide trained female nurses for cases requiring their services.

Medical and Chirurgical Faculty of Maryland.—The 83d annual meeting of the Faculty was held in Baltimore, April 12 to 16, 1881, Dr. H. P. C. Wilson, of Baltimore, President, in the chair. The annual oration was delivered by Dr. William Goodell, of Philadelphia. A number of scientific papers were read in the sections. The following officers were elected for the ensuing year: President, Dr. Frank Donaldson; Vice-Presidents, Drs. A. H. Bayley and I. E. Atkinson; Secretary, Dr. W. G. Regester.

Instruction Preparatory to the Study of Medicine in the University of Pennsylvania.—In the assignment of Prof. Joseph T. Rothrock to a Chair of Botany and Dr. Andrew J. Parker to a Chair of Biology in the Towne Scientific School, the Trustees of the University have not merely enlarged the curriculum of that school by the addition of two subjects of great importance, but they have also provided the means of rendering effective the *Sixth Course* as laid down in the general catalogue—a *course preparatory to the study of medicine*. The scheme of the course has not been fully elaborated, but, as now published, includes English Composition, History, Social Science, Latin, French, German, Physics, Chemistry, inorganic and organic, with laboratory practice, Botany, vertebrate and invertebrate Zoology, Mineralogy, and Geology. With the completion of the course, and the passing of appropriate examinations, the degree of Bachelor of Science is conferred.

It will be seen that this course includes a large number of subjects which not only lead to the higher culture so important to the physician, but directly prepare him for the special studies in human anatomy, physiology, medical chemistry, etc., which should occupy him during the first year of his medical studies, as well as furnish the knowledge of physics and mathematics, now so essential to an intelligent study of certain branches of practical medicine, notably physical diagnosis, ophthalmology, laryngology, and otology.

Too high a value cannot be placed upon such a course. Since the establishment of scientific schools, both independently and in connection with colleges, courses have been adapted preparatory to the special studies of a large number of occupations, including now, with the establishment of the Wharton School of Finance and Economy at the University, the various branches of mercantile pursuit. Not only has the mass of facts which the physician of to-day has to master increased a hundredfold, but he requires also rare mental qualities to be acquired only by training, in order that he may sift the true from the false, appropriately use the former and discard the latter. Much more, perhaps, to the study of medicine than to that of any other profession should be shaped the previous training and knowledge of the student.

So far as we know, the University of Pennsylvania is the first institution to adopt such a curriculum in its collegiate department, and we cannot but think that it will commend itself to students who desire to be thoroughly prepared to enter upon a medical course of study.

Still another advantage of such a course may be pointed out. It is constantly occurring that a young man looking forward to the study of medicine feels that he cannot, on account of his age or want of means or other sufficient cause, take a full collegiate course before beginning his professional studies, while he can still spend a year or more at college. To such a one the *Sixth Course* in the Towne Scientific School affords an admirable opportunity. For by a judicious selection he can avail himself of those branches a knowledge of which will be of the greatest use to him in his medical studies, and thus virtually prolong the period of those studies most advantageously.

With the better grade of material thus afforded, the Medical Department of the University hopes to be able also to make still more effective the measures of reform in medical education which it inaugurated four years ago.

Jefferson Medical College, Philadelphia.

The continued increase in the size of the Jefferson classes has rendered additional accommodations absolutely necessary; hence, in the recess since the close of the winter term, the main building is being remodelled by an extension of the front, by adding a new story, and by constructing new Laboratory Rooms. By this extension of the front, the seating capacity of each lecture room will be materially increased. Thorough ventilation is secured to each lecture room by the introduction of the *Manchester system*. By the addition of another story a new and more commodious dissecting room will be constructed, and the present dissecting room will be converted into a laboratory for experimental therapeutics and pharmacy. A large, well-lighted room has been provided for practical obstetrics, and another with special reference to microscopic work, and for a laboratory of pathological histology and morbid anatomy.

The Faculty have made important changes in the curriculum. They have extended the winter term about one month, so that the Commencement exercises will take place at the end of March. Two very important objects to the student have been secured by this change; the weekly number of lectures is reduced in some of the branches, which gives the student more time for practical and laboratory work, and affords him an opportunity to review and digest the lectures. The whole number of didactic lectures in each department will be about the same as before, the only difference being the distribution of the lectures over a longer period.

Courses of practical and laboratory instruction are to be given in connection with all the chairs, and are designed for, and obligatory upon, candidates for the degree—who are not already graduates of other schools—and are free of charge to them, except in the case of practical anatomy. Candidates for *partial examination* will be required to attend those branches on which they desire to be examined at the end of the session.

New York Academy of Medicine.—At a meeting of the New York Academy of Medicine, held May 19, Dr. E. G. Janeway, the retiring member of the Health Board, read a paper upon the present endemic of typhus fever in the city, tracing its course from its inception.

At the same meeting Dr. C. C. Lee offered a resolution congratulating Mr. Spencer Wells upon the completion of his one-thousandth case of ovariectomy, and upon his wonderful success in the operation—769 lives having been saved by his individual efforts. The resolution was unanimously adopted, and the president, Dr. Barker, appointed to personally present the same to Mr. Wells.

Louisiana State Medical Society.—The fourth annual meeting of this society was held at New Orleans, March 30th, Dr. C. W. Smith, President, in the chair. Dr. J. S. Herrick, Corresponding Secretary, reported that there are in the State 799 physicians, of which 642 are regular, 65 doubtful or unknown, and 92 irregular. The following officers were elected for the ensuing year: President, Dr. A. A. Lyon, of Caddo; Vice-Presidents, Drs. D. R. Fox, of Plaquemines, J. P. Davidson, of Orleans, A. B. Snell, of Iberville, R. H. Day, of Baton Rouge, W. W. Ashton, of Caddo, J. D. Hammond, of Morehouse; Secretary, Dr. L.

F. Solomon. The next annual meeting will be held in New Orleans on the last Wednesday in March, 1882.

New York Health Commission.—The Mayor has nominated Dr. Woolsey Johnson for the position of Health Commissioner in the place of Dr. E. G. Janeway, whose term of office has recently expired.

Iodine Fumigation of the Ear.—Dr. GUÉNEAU DE MUSSY speaks highly of the employment of iodine in affections of the cavity of the tympanum. A very firm little ball of iodized cotton surrounded by wadding is introduced into the meatus. The iodine gradually exhales, filling the tympanum with an iodized atmosphere. At the end of from twenty-four to thirty-six hours the cotton becomes decolorized and requires renewal.—*Med. Times and Gazette*, April 23, 1881, from *Journal de Thérapeutique*, March 25.

Prosecution of Unqualified Practitioners.—Still another unqualified medical practitioner is being prosecuted in New York for unlawfully practising in violation of Chapter 513 of the Laws of 1880. The prosecution was instituted by the Medical Society of the County of New York.

The Seaside Sanitarium, at Rockaway Beach, will soon be opened for the reception of destitute sick children. This institution was founded five years ago, and has received, during the summer months since its establishment, over 40,000 sick children from the tenement houses. 245 weekly inmates, besides 200 daily visitors, can be accommodated at the Sanitarium.

OBITUARY RECORD.—Died, in Philadelphia, on the 10th of June, aged 45 years, H. LENOX HODGE, M.D., Demonstrator of Anatomy in the University of Pennsylvania, and Surgeon to the Presbyterian Hospital and to the Children's Hospital.

Dr. Hodge was the son of the late Dr. Hugh L. Hodge, the eminent Professor of Obstetrics in the University of Pennsylvania. He was educated at the University, and graduated in the arts in 1855 and in medicine in 1858. He subsequently served a term as resident physician at the Pennsylvania Hospital. During the war he was attached to the Satterlee Hospital, at Philadelphia, and also served in the field with the Army of the Potomac. On the organization of the Presbyterian Hospital in 1872 he was appointed on the surgical staff. He was elected President of the Pathological Society in 187-. In 1870 he was appointed Demonstrator of Surgery in the University of Pennsylvania.

Dr. Hodge was distinguished for his integrity and uprightness. He was a conscientious student and pains-taking surgeon; and as a teacher he was always deeply interested in the welfare of his students, and, in turn, was greatly beloved by them. Charitable associations for the relief of the poor and afflicted found in him a ready co-worker, and at the time of his decease he was a director in the Pennsylvania Institution for the Deaf and Dumb, and President of the Society for the Organization of Charity. Of kindly nature and generous heart he was ever ready to give aid and counsel where it was needed, and deeply imbued with the true religious spirit, its practical lessons were beautifully exemplified in his daily life.

To Readers and Correspondents.—The Editor will be happy to receive early intelligence of local events of general medical interest, or which it is desirable to bring to the notice of the profession. Local papers containing reports or news items should be marked.

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